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You'll think Christmas has come early!



YOUR MACHINE

AMIGA

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NEW COMPUTER EXPRESS

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TANDY BEGINS THE HARD SELL ON THE NEXT STAGE OF PC EVOLUTION

The multimedia CDPC gains massive software support - expect it here soon - page 9

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News: because it's weekly we print it first - pages 4-7

What's New

Get the most from BT's digital system with an ISDN adaptor, word processors, map making PC software and a dBase to C translator - page 10



All around the world you've been looking for this for your PC

COVER DISK 6

Express software: dying to get stuck into your packed Cover Disk? Turn to page 12 for all you need to know

THE EXPRESS FEATURE



ST desktop publishing

Calamus, Timeworks and PageStream 2 - which one is best for you and your ST? - pages 54 & 55

• Timeworks is one of the best systems for handling large amounts of text. But does

INSIDE INFORMATION

The Amiga, ST & PC pages

Everything that's new on your machine's scene, plus the best previews and tips around - pages 49, 50 & 52

• Pixel 3D - the brilliant object converter for Amiga ray tracing programs



Public Domain

The essential guide to the best in low-cost software - pages 54, 55 & 56

Games Week

Hard hitting review of *The Blues Brothers* and terrific tips for *ELF* and *Brat Plus:* the latest news - pages 60 & 61



• Jake or Elwood? Fast, addictive gameplay, hilarious animation and, brilliant music

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Extra super paint package

One of the Mac's most ancient and revered paint packages, SuperPaint, has been given a facelift.

Released, Aldus, has revised version 3 of the software and has incorporated a whole host of enhancements.

These include:

- Black and white, and colour support
- 16 million colours available to users on 8-bit monitors
- Texture fills
- Hot keys

Aldus even claims that users can attain "photo-realistic" projects. Not only has more technical wizardry been introduced to SuperPaint, Aldus project manager, Cindy Taylor, also maintains that it is easier to use and that "users will benefit from a reduced learning curve."

System requirements are for a Mac Plus or up with 2Mb of RAM and a hard drive. It is also System 7 compatible.

Price in the United States is \$199. This looks as if it will maintain a straight sterling for dollar exchange when it eventually hits the UK next year. ■

EXPRESS...

The Japanese are well known lovers of gadgets but this time they have gone too far for their own good. So many mobile phones are being purchased that NTT - Japan's largest telecommunications company - fears that all the numbers will run out by 1995.

...SNIPPET

Cray computer proves 'green' ocean theory

British scientists using a Cray Supersupercomputer have discovered that oceans absorb more carbon dioxide than had previously been supposed.

The Cray, part of the £10 million Fine Resolution Antarctic Model (FRAM) project, showed that the Agulhas Current carries an enormous 1 billion mega-watts of heat absorbed from the atmosphere.

Data from the Cray disproved theories that water was warmed as it flowed from the Pacific, via South America, into the Atlantic. Instead the heat comes directly from the atmosphere, showing that oceans are as good at controlling the greenhouse effect as trees are. ■

Have Laplink will travel

Portable computing with laptops and notebooks is becoming more and more popular and with it comes a growth in peripherals.

The latest to hit this healthy case is LapLink Pro from Travelling Software.

This piece of file transfer software is compatible with more than 60 Hayes-compatible modems, and enables users to transfer data to and from computers anywhere in the world.

For those of us too busy to bother with protocols, dialling commands and setups, the program is a real boon. It handles all this for you.

According to a spokesman for the company, once all these peripheral actions have been handled, "The user can then transfer the files and manage the disk drives of both the computers as though they were only a few feet apart".

An added attraction, according to Travelling Software's European sales and marketing manager, David Aldridge is "The fact that we have broken down from the cable only scenario and taken the modem route opens up a whole new dimension to portable computing with no limitations to PC file transfer."

The system also enables use of T3's



• Laplink Pro - opening up a new dimension in portable computing

Blackbird communication technology. This data compression function offers parallel transfer in 4 or 8-bit modes giving a claimed 20-60 per cent increase in speed over other communications systems.

Laplink Pro costs £125. For more information call 0753 631855. ■

On-line system manager requested virus to be uploaded

VIRUS ALERT ON COMPUSERVE

HOW THEY EXPLAINED IT AWAY

This is an extract from the message run in the Virus Forum on Compuserve in order to alert users to the virus drama.

"IMPORTANT NOTE - PLEASE READ
As a result of this error, we have decided to close down Library 8, the Suspect Virus upload library. Forum users may continue to submit suspected viruses for review through Compuserve Mail. This change will prevent this error from recurring. We regret that anyone may have downloaded the infected file in error."

meeting immediately, and has been told that such an action should not take place again".

POTENTIAL DISASTER

The virus was in fact resident on the Virus Forum for nine days, from 9 to 18 September. It is this time there were nine downloads.

Andrew Grey said: "Obviously it was not a wise thing to do. And had it been uploaded

to a Microsoft or Adobe forum for example, it could have been an absolute disaster".

Because the virus, called Taiwan 4, only actually affects a file called AUTOCAD.EXE, the main system file for Autodesk's AutoCad computer aided design system, even if it had got into any of the public sectors it is unlikely to have done much damage.

However, the mere fact that the head of a specialists forum requested the uploading of a live virus to an international on-line system, does raise serious questions.

WHO IS TO BLAME?

John McAfee, the American responsible for the forum, claims he was unaware that it was possible to download infected files from his own forum. McAfee also states that of the nine people who downloaded the file, only one contacted the sysop. The virus was not spotted by the sysop, but by one of the people who downloaded it and then contacted Scotland Yard.

Mr McAfee has taken all the blame on his own shoulders, and no blame whatsoever should be put on Compuserve. ■

Compuserve, the UK's most popular on-line system was subject to a virus uploaded on the request of one of its own forum managers last week.

The on-line system which has around 200 forum areas of special interest, was in no way to blame for the act of foolishness. And the virus, contained on a file called MOUSE.COM, did not actually make it into the public forum.

It was found in an American-instigated area called Virus Forum run by McAfee Associates in the USA.

UPLOADING MISTAKE

According to Compuserve's UK general manager, Andrew Grey: "Rather foolishly, a forum manager asked for a virus to be uploaded. There were nine downloads from that area in the UK, but this is a forum dedicated to the study and eradication of viruses. The upload of the virus was a mistake and it doesn't change the benefits to be gained from the system".

Asked whether this could happen again, Mr Grey told Express: "This was the first time it has happened. The manager was taken into a

Shoot from the lip

"But recession is an opportunity for change, not a reason for it"

IBM UK's general manager, Nick Temple, proving that tautology is valid jargon after all.

"From our headquarters in Reading, Comlink has a firm venture point overlooking the wider European arena".

MD of Comlink, Bruce Reid, setting up the jewel of Berkshire as the new European capital.

"In the leisure hardware market, Atari have slit their throats and hung themselves up to bleed."

Greenle's Ian Stewart commenting on the ST. (from Computer Trade Weekly)

"Throw away the machines"

The gospel according to French chaletier, Michel Odent as reported in the Guardian.

"Obsolescing an engine or transmission computer because of a software change will soon be history"

Dennis Florence of Chrysler adding to the English language with some verbing of his own.

Trumped up!

American millionaire Donald Trump, who has been unlucky in love and finance over the last year, has had his ideal male chosen for him. By a computer.

The marriage minded machine says that crumpled Trump's sweetheart would have been of the Fabulous Baker Boy star Michelle Pfeiffer, the eyes of Madonna and the bust of Dolly Parton. It did not manage to comment if she would also have the aversion of Scrooge McDuck. ■

US company blamed for down fall of the ill-fated PC2000

AMSTRAD IS SET TO SUE AGAIN

In what looks more and more like a concerted bid by troubled Amstrad to claw back cash from its faulty PC2000 range, it is embroiled in yet another multi-million pound legal battle.

The new £80 million wrangle is with US company Western Digital, and comes just weeks after an £87 million suit was filed against US hard drive maker Seagate.

The latest case centres on Amstrad's contention that Western Digital had supplied it with WD384R hard disks which were not properly specified and caused Amstrad massive financial losses when it had to recall its PC2286 computers.

Western maintains that, because the drives were shipped in 1988 and Amstrad did not file any claim until 18 months after this, it will contest the suit.

The American company says it could counter-sue Amstrad for costs incurred trying to help Alan Sugar's company out of its problems.

DISK QUALITY

Added irony comes from the fact that Amstrad claimed that Western's drives were not as good as those supplied by Tandon for the ill-fated PC2000. The disk drives that Western,



Alan Sugar is trying to retrieve some of Amstrad's lost cash - and a lot of it. The PC2000 has caused Amstrad more financial problems than anything it has produced so far

which took over Tandon's disk drive operations in 1988, supplied were actually made by Tandon in the first place.

This case comes shortly after Amstrad set its sights on hard drive maker, Seagate (see Express 151) in a claim against £87 million worth of faulty STP277R hard drives which were fitted to Amstrad PC2386s.

Amstrad's only comment on the matter

came in the form of two terse press releases both of which finished with: "Amstrad has been advised by its attorneys not to make any further public comment about this litigation until it is successfully concluded".

PC2000 BITES BACK

Amstrad is known to have large numbers of PC2000s littering its warehouses. These two claims on its US suppliers will go some way to recouping some of the lost capital invested in these machines. But more importantly for the company, winning the cases will raise its image in the public eye. At the moment Amstrad is keeping it a low profile. The obvious reason underlying this is that if it loses one or both cases, the perception will be that it was responsible for the poor quality of the machines. However, if it is victorious, then the blame will be shifted across the Atlantic.

Although the money will be more than useful to the company which has just suffered a 54 per cent slump in profits from nearly £50 million to £20 million, it appears it is concentrating on its reputation. Having still not made a significant impact on the highly lucrative US market, these cases could prove highly significant for Amstrad in terms of public image. ■

Atari up in arms about PD abuse

Atari has released a particularly peeved press release relating to its software appearing in the Public Domain.

UK software manager for the company, Bob Katz said: "Atari (UK) has threatened legal action against individuals or companies found to be illegally distributing its copyrighted software".

It is thought that the product which sparked off the rumour was the Neochrome paint program. Versions 5 and 6 of this were released into the Public Domain following a disagreement between the author and the company. However, since then all versions of the program have been firmly Atari's copyright.

This made little difference to certain individuals who have cracked later version, and released them into the public domain as Neochrome Master.

Thirty companies have been contacted by Atari with regard to the problem. As yet no legal action has been taken. Apparently Atari is relying on the good intentions of PD libraries and other outlets to put a stop to the production of its copyrighted product.

As Bob Katz comments: "Atari unanimously supports the notion of Public Domain, but recent abuse of the system has forced the company to take action". ■

Apple hits the High Street

Apple Computer UK is no longer content with its Apple Centres as the main way to get its message across to prospective buyers.

It has decided to set up an 'Applepoint' retail outlet in conjunction with one of its biggest outlets, Thames Valley Systems.

This first Applepoint, based in Slough, is the vanguard for an aggressive attack by Apple on the UK High Street market. Apple UK's director of channel development, the man responsible for liaison with retailers, Chris Culvert, confirmed this: "I look forward to other High Street Applepoint shops appearing over the next year".

Applepoints are already familiar sights in Europe. Essentially they are areas in existing shops where shoppers can pop in and try out Apple's range of machines including the Mac Classic, and the new computers which Apple is known to have lined up for release. ■

That's all white son

Meet Jimmy Whitwind White at the World of Commodore show and pick up a few tips



The World of Commodore Show offers more than just a great chance to see the full Commodore range, meet New Computer Express journalists and attend the biggest computing extravaganza in Europe. You could also get to meet Jimmy White.

Jimmy, who has confirmed his place in the snooker firmament, will be signing copies of Jimmy White's Whitwind Snooker from Virgin games on Friday 15 November, you might also be

Sounness from the sidelines

You too can feel the humiliation of defeat by a team of amateurs like Kuusysi Lahti. You rant and rave like Graeme Sounness from the sidelines as you play Zappelin Games' Graeme Sounness's Vector Football.

Programmed by ex-Dorset boy Glyn Humphries, the game is already being touted as "more reasonable than any previous 3D footy game even if the players do have thighs the size of an Anfield". High praise for a game which has not taken the overhead view à la Kick Off.

There are options for either one or two player



Now you can sit on the sidelines and look at your boots as your team goes down to a bunch of amateurs from Finland

games in an eight team tournament. But best of all you can build and rebuild the stadium by adding or removing crowd barriers, stands, goal nets, pitch lines, corner flags and even the pitch patterns.

All the figures are drawn in vector style rather than sprites much like 3D Sports Boxing. Graeme Sounness's Vector Football is available for the ST and Amiga at a price of £24.99. ■

EXPRESS...

Signbank is a new, computer controlled, banking system in Australia. It has been set up to electronically store customer's signatures. Nowadays, instead of moving copies of signatures from branch to branch, the whole thing is automated.

...SNIPPET

Apple MacSki

Apple Computer has started an all-out media campaign to make its name in Russia.

The company has chosen as its slogan a phrase which would probably have been laughed out of every ad agency in the West as being too wordy. It is as follows: "A solid US family has serious intentions to live and work in the USSR".

The bill will run in Jostova among other news media, but will not appear in Pravda - the paper of the State. It will also appear on Russian television. ■

The new age sage

Are you in need of physical and mental relaxation and do you have the desire to learn?

Well throw away all that ambient music and get ready to have your brain speeded up. A new way to accelerate your learning using respiratory bio-feedback and audio-optical signals has been discovered in London.

The brain absorbs information much faster during periods of deep relaxation and in this state the mind focuses only on the

information being presented.

The London Neuro Centre, famed for the Mind Machine, is now selling a new device called the SITA portable which relaxes you by monitoring your breathing patterns via sensors and then feeding them back to you.

Once a consistent breathing pattern has been registered a tape automatically begins playing educational material. Priced at £245 it is available from London Neuro Centre on 071 204 4769. ■

YABBA DABBA DOO!

"Hey Fred!" "Yo Barney, what's up?" "We've finally made it on to the Sega Master System case of those guys at Grandpa and Segal!"

Based on the famous Hanna-Barbera cartoon characters the game is spread over four segments, which starts with a bit of home-decoration for Fred. While trying to keep Pebbles in her pen, Fred must also keep hold of the elusive paintbrush.

Fred and Barney then visit Bedrock Super Bowl for the Sowing final. But the game is not over yet as Fred returns to find Pebbles has escaped. He must find and rescue her before she comes to harm. Released later this month The Flintstones costs £29.99. Contact: 081 655 3494. ■



• Stone-Age copers with the Flintstones crew on the Sega Master System

EC regulations force Amstrad to claim that PCWs are not expandable

PCW BUS STOPS

Amstrad was forced to modify the design of its latest word processing workhorse, the PCW 8256 and PCW 9512 Plus to keep in line with the EC, Express can reveal.

To adhere to new regulations which come into effect in 1992 and concern computer emissions which interfere with radio signals, Amstrad has been forced into claiming that the machines are not expandable, when in fact they are.

It has also been forced to 'pretend' that the expansion bus at the rear of the machine, in fact a simple card edge which takes the RS232C interfaces and other peripherals available to the PCW, does not even exist. It is instead calling it a 'hard-wire test port'.

This has lead to rumours that the new machines are totally incompatible with the previous 8000 series and the PCW 9512, both of which have fully exposed edge connectors.

RUMOURS ARE RIFE

The confusion about compatibility problems arises from the fact that, although the new card edge is mechanically identical to that used in the preceding series, it is hidden deep within the back of the machines and is covered by a plastic plate.

This means that, without modification, older peripherals such as RAM-pack upgrades, and RS232C interfaces will not fit



• Amstrad's new PCW: rumours of expansion disaster are unfounded

the new machines.

Manufacturers such as SCA systems are maintaining that this will not lead to 'horror stories' regarding the new PCWs.

Peter Maynard of SCA told Express: "The new expansion ports have had to be covered and hidden in order to comply with new EC rules. This does make them inaccessible to currently available add-ons. However, we will certainly be developing modified units to cope with this problem".

Locomotion, however, has run into a problem with its recently launched Localink PC-to-PCW connectivity package. The company's technical director, Richard Clayton, said: "There is a slight problem with the new port on the 9526 in

that, in order to abide by many of EC regulations especially in Germany, Amstrad has been forced to say that the PCW is not expandable. So it has covered the port."

"It has also placed it low-down on the machine. This means that if you connect many of the old peripherals, such as Localink, they will touch the floor. Frankly though, because there are a variety of PC programs which can read 3.5-inch, 5 sector, CP/M disks on the PC, you probably don't require Localink on the new machines. However, if public demand is great enough, we will produce a compatible version".

TESTING TIMES

According to sources close to Amstrad, the card edge is being termed as a 'hardware test' rather than an expansion slot.

The unnamed source also told Express: "It is well known that PCWs kick out RF (radio frequency) interference like no one's business. To cope with this the company has been forced into burying the port at the back of the machine, and also to cover it with the plate."

"Removing the cover is child's play. It looks like a fudge put on by Amstrad as a last minute thing rather than a pre-planned piece of design. It's only held on by a couple of screws and, once removed, the slot is immediately ready for use. The only problem I can see is that by doing this you

invalidates the warranty".

We called Amstrad to confirm this, and were told by Nick Hewson on behalf of the company: "No, this isn't the case as far as we know. Information isn't clear at the moment. But there appears to be no problem with warranties".

OUT WITH THE OLD

However, all is not rosy in the garden for owners of the older machines.

With developers having to move over to the new machines, it will not fail too long before it becomes economically unviable to make peripherals and dongles for the old PCWs.

This will have one major effect on owners of the old machines who wish to upgrade. They will have to buy the new PCWs or leave that format behind in favour of PCs.

This also applies to software. It is far easier, and cheaper, for software houses to duplicate the hugely popular 3.5-inch disk format - which is used on PCs, Amigas, STs, and Macs - than for the 3-inch - only used on the PCW, CPC and Spectrum.

With news that several unbranded 3-inch disk manufacturers have stopped trading, leaving only one producer of 3-inch disks remaining - Maxell - the position for the older PCWs looks more and more dismal. For further news on this see next week's issue of Express. ■

A pocketful of LEO

UK-based DIP Computers, known for its hand-held machines, has produced a new MS-DOS compatible machine - the LEO.

Weighing just 310 grammes, the LEO has a variety of expansion options using four built-in ports. An optical interface using an infra-red link enables users to transmit data to a personal computer. There is also a built-in barcode reader and serial connectors for printers and modems.

Built-in memory cards mean the LEO can be supplied with a variety of memory configurations. Enabling expansion and easy maintenance these cards are available up to 8Mb. They can also be configured up to 640K as RAM memory with the remainder as a solid state DOS disk.

Power supply comes in the form of a rechargeable battery pack on which the LEO can run for up to 50 hours. For more information call 0483 391555. ■

EXPRESS...

Next year's generation of Chrysler cars will have computers on board which will help to monitor fuel consumption, engine performance and transmission drivability.

The system will use Flash memory so that the chips can be upgraded to cope with any new technological advances that the company intends to introduce by 1995.

...SNIPPET

Nintendo nurturing

If McDonald's can get away with a hamburger university, why on earth should Nintendo not set up a national curriculum for computer games?

No reason at all. This is why yet another school for Nintendo games designers has been set up in Japan.

A company called Enix, makers of Dragon Quest which has already sold 10 million units, is the master behind this class.

Called the Enix Game School, the establishment will produce 135 qualified programmers for the NES, Game Boy and Super NES machines each year.

In order to qualify for admittance, students will have to pay out a vast 1.5 million yen (about £2,500, the same as a UK public school fee).

Nintendo and Enix will both gain new games and corporate loyal staff. ■

COMMENT

The launch of the PCW six years ago was a move which earned Amstrad – rightly enough – the accolade of making computing accessible to the masses.

The all-in-one package, complete with printer, monitor and keyboard, hit its niche market at an aggressive price, and with ferocious accuracy.

Small wonder, then, that the company has decided to consolidate its success with the machine, and bring two new models on to the market.

The two new machines, the PCW9256 and 9512 Plus, demonstrate continued evidence of Amstrad's pragmatism – a trait which is largely responsible for the company's commercial success to date.

COSMETICS

Differring mainly in cosmetic terms, the new models are simply a more streamlined, state-of-the-art version of their predecessors. The major departure from the original specification is the arrival of the 3.5-inch drive as standard – creating, effectively, a PCW version of the PC.

What this adds to the PCW is the ability (with the appropriate software) to transfer data from CP/M to MS-DOS format machines – without the need for investment in costly hardware upgrades.

NEW PRODUCTS

The industry is responding with characteristic speed to Amstrad's obligation to conceal the 9256's expansion port. SCA Systems will have finished work on a special adaptor to allow immediate accommodation of add-ons, as the new PCW hits the High Street. Major software houses, such as Locomotive, have already upgraded their products to the new format.

RIGHT FORMULA?

The PCW has suffered at the hands of the computer snob for years; with a lack of direct competition, it has, unfairly, been ranked alongside entry-level PCs, and has generally emerged scathed.

The new range of machines bears witness to the strength and popularity of the PCW – and builds on a longevity scarce enjoyed by counterparts in the PC market. The PCW formula was right in the mid-80s; today, there is no reason why it cannot be right as well. ■
By Sophie Lancaster, editor of 1800 Plus, the UK's most popular PCW magazine

Hardware manufacturers' consortium creates new standard

MULTIMEDIA PCs 'ARE THE FUTURE'

The official launch of the next stage in the PC evolution, Multimedia PCs (MPC), took place in the USA on Tuesday.

Tandy announced that it would be setting up specialised outlets to popularise its new machines. Its MPC models all have the company's CRD-1000 CD-ROM player built-in, and are based on the 80386 and 80386 processors. They range in price for \$2,799 to \$5,499.

A consortium of 12 major league, PC-compatible hardware manufacturers has created a new standard which Tandy's Vice President, Howard Elias, described last week as "the future of personal computers."

His remarks were made at a forum in New York City last week where nine companies – including Microsoft and Broderbund – demonstrated multimedia products which will run on any PC conforming to the new standard.

BASIC STANDARDS

The consortium, known as the Multimedia PC Marketing Council, has created a new trademark – MPC – which can be licensed by

developers of multimedia applications. The Council hopes that MPC will become a widely accepted standard, and that purchasers will look for the MPC logo before they buy.

Theoretically, any computer which conforms to the basic MPC standards will be able to run any MPC-branded application. The basic hardware requirements include a minimum 80286 processor, 2Mb of RAM, a colour VGA display, a CD-ROM drive and the ability to record and play back sound.

BIG NAME BACKING

Numerous big-name companies are backing MPC, including Microsoft – whose Windows graphic user interface (GUI), together with some multimedia extensions, is included in the list of basic requirements.

US company Britannica Software has already produced MPC-compatible software: the entire Encyclopaedia Britannica on CD-ROM, and companies like Broderbund and Maxwell Electronic Publishing also have MPC-compatible applications available.

While MPC does have its opponents – including industry giant IBM – the standard is already gaining acceptance, with companies like Philips and Zenith expected to produce MPC products in the near future. According to Howard Elias of Tandy, "we fundamentally believe that multimedia is a function of PCs. This is not a niche; this is the future."

However, critics say that MPC is under-specified, and needs a more powerful basic configuration if it is to be of any real use. And some feel that Apple has a hold on the multimedia marketplace which is too strong to break.

THE FUTURE OF PCS?

If it gains widespread recognition, MPC could become a major standard in the PC marketplace. Microsoft's involvement will certainly help it along, but ultimately the consumer will have to be convinced if MPC is to really succeed; numerous other attempts to create standard hardware configurations – such as the ill-fated MSX – have already shown that it is all too easy to fail. ■

Elonex Ships PC-320X range



• A British 386 for under £1,000? Yes indeed. It comes with all the standard software and hardware, but there's also a most maintenance deal thrown in

Elonex has brought out a new range of desktop computers with an 'all in one' motherboard design.

The C386 PC-320X Slimline model features a 20MHz Intel 386SX processor with 16K cache, 1MB RAM, 40MB hard disk, 102-key keyboard and 14-inch colour Super VGA display.

All models come complete with the latest version of MS-DOS 5, Windows 3 and a Microsoft compatible serial mouse. The all-in-one motherboard features a Super VGA display adaptor, floppy and hard disk

controllers, and one parallel and two serial ports built-in.

RAM can be expanded to a total of 16Mb, cache memory can be upgraded to 64K, and an 80387SX maths co-processor can be added for heavy number-crunching applications such as computer aided design (CAD).

For the first year, on-site maintenance is available at £25, and is then charged at 8 per cent of invoiced costs for each subsequent year.

Contact Elonex on 081-452 4444. ■

U can touch this

Following on from Pison's new Organiser (Express 151), ACS Data Limited has released its own hand-held computer, the TouchPC.

Called the TouchPC because of its touch-sensitive LCD display screen, the computer is a PC compatible based on a 9.54MHz V40 microprocessor. It features two serial ports, a parallel port, a BCR port (for barcode readers) and, with the addition of a 'cradle' to place the machine in, infra-red optical communications are possible for high speed data transfers without using wires.

The machine comes with a basic 640K of system memory, while an extra 1Mb is available using SRAM cards.

Data is stored using a Jaida 4 card drive which supports battery-backed SRAM, ROM, EPROM, EEPROM and variety of other formats. A Jaida 4 card



• A steady hand is all you need to operate ACS Data's TouchPC – it uses a touch sensitive screen to input information

drive is available for PCs to ensure data can be transferred between machines.

The cradle for the TouchPC also features an additional serial interface, a RS485 multi-drop network interface, parallel port and a PC keyboard port. Available in bulk in late December, the TouchPC will cost £250. A price for the cradle add-on has yet to be announced. Contact ACS on 061 873 8323. ■

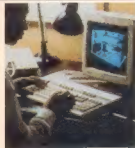
Attention all Monsters!

ST, PC and Amiga users are in for a treat from the Monster Klub.

This new organisation offers up to 30 per cent off recommended retail prices on software, hardware and accessories. And you don't even have to be a member to gain the benefits.

As an added attraction to Express readers, the first 10 people who quote this article when ordering ST or Amiga software will be given a copy of the highly rated Monster Business game. Monster Klub can be contacted on 0633 503362. ■

NEW PRODUCTS



• The 486s are coming! The 486s are coming! And this tower system from Icom is coming for under £7,000!

I say, I say EISA

PRODUCT: 486 tower PC
NAME: Executive TW486/336
COMPATIBILITY: PC

Amstrad may like trying to flag 286s again, and a 33MHz 386 might be the height of some people's ambition, but the real flavour of the month are PCs based on Intel's 486 processor.

Icom's new Executive version comes with 8MB of interleaved RAM which is expandable to 64MB, a 128K RAM cache, 330MB hard disk, and it supports the highly popular Wetek maths co-processor. For communications with the outside world, and connectivity to hardware add-ons there are two serial ports and one parallel port. The unit also makes use of Extended Industry Standard Architecture (EISA).

Icom seems to believe that Bill VGA-compatible tower unit is 'compact'. Well even a cursory glance at the photograph above should disabuse most users of this. What it lacks in height, it makes up for in width. Nevertheless, it is an impressive specified machine, ideal for networking and general business use.

Price: Entry level starts at £2,995
Availability: Now
Target users: PC users who require an upgrade to the latest technology

Contact: Icom: 081-336 1282
Perceived competition: Chipsat, Amn, Tandem and a whole host of others.

Lonely as a...

PRODUCT: Word processor
NAME: Wordworth
COMPATIBILITY: Amiga

The latest version of Wordworth, the word processor which has taken the Amiga world by storm, will be released on 21 October.

It has been subject to several major enhancements including the following:

- Font rotation, graphics support.
- PostScript driver for Adobe 3.0 font.
- Support for over 400 printers.
- Colour near letter quality printing.
- Auto page numbering/page count.

Price: £129.95 (upgrade £25)
Availability: Now

WHAT'S NEW

New computer products are coming at you thick and fast. But being a discerning user, you don't want to deal with the pap. Read on for the facts...

Dashing digital deal

PRODUCT: ISDN adaptor
NAME: Pocket V24
COMPATIBILITY: PC

BT's Integrated Services Digital Network (ISDN) is now starting to take a hold all over the country. In a few years time it will be the standard used in every home and office in the land.

So now is a good time to ensure that you and your computer are linked into the ISDN system.

Datatec's adaptor is slightly smaller than a personal cassette player and connects to any RS232c-compatible machine via that very port. Essentially it enables a computer, using virtually any communications software to link into the super-fast ISDN and provide data transfer rates of 2400, 4800, 9600, and 19,200 bits per second when linked with V110 devices.

It makes use of industry standard, Hayes AT commands in order to make it

behave in a similar way to a quick modem.

The pocket-sized unit is powered by a PP3 battery, an optional power supply or by using pin 9 of the D-type connector.

Once fitted to your machine, the unit can provide fast data access, and when connected to a synchronous controller card, data transfer rates rise to an amazing 64K per second. The combination of BT's digital delight and your computer could well be one of the best moves you will make in the next year.

Price: £395
Availability: Now
Target users: All businesses using PCs
Contact: Datatec: 081-543 6417
Perceived competition: None, as yet no other company has come up with a BABT approved system for ISDN.



• No, it's not a mouse at all. It's a handy little device which will enable you to get the most from BT's new digital system

Target users: Any Amiga user
Contact: Digia International: 0395 270273

Perceived competition: Per-Pal, WordStar

A real plus for dBase users

PRODUCT: dBase to II translator
NAME: CodeTranslator
COMPATIBILITY: PC

Now here's a slab of software for the real programming buffs amongst you. It combines two of the world's most popular programming tools in order to produce a powerful addition to your arsenal of computing armaments.

Basically, you can take applications created using the hugely successful dBase III language and turn them into stand-alone C applications which can be run directly from the command line with a minimum of fuss and bother.

What this means in terms of productivity is that the applications will run more quickly and with less memory usage.

Equally important is the fact that any programs created using this system can be distributed by you without incurring any royalty charges.

The CodeTranslator bundle does come with a hidden agenda however, you will also require CodeBase which costs an extra £190. However, if you buy the two programs before 31 December, The

Software Construction Company will throw in a copy of Borland's popular Turbo C++ programming language for free. This in itself is a worthy deal and one which should not be overlooked.

Price: £129 (it requires CodeBase 4.2 to run. This costs an additional £190)
Availability: Now
Target users: Corporate market, especially companies with number intensive activities.

Contact: The Software Construction Company: 0783 244025

Perceived competition: No one else has produced such a translator.



• Cartography is an ancient art practiced by skilled artisans. But now you can get involved using a PC

Map of the day

PRODUCT: Map making software
NAME: MapViewer
COMPATIBILITY: PC

Charts and maps have long been areas in which the British excel. Now, even if you are unable to draw, and have not got the faintest idea where Starling is in relation to Bude, you could be producing high quality charts in a fraction of the time it would normally take you using conventional methods. MapViewer is a system which originated in the United States. It runs on PCs and is Windows compatible.

Creating maps is achievable in a number of ways. You can take basic elements from a library of map types, draw your own using a range of CAD (Computer Aided

Design) packages such as the industry standard AutoCAD, you can also layer different map types.

Data for map information can be imported from software such as MicroSoft Excel, Lotus 1-2-3, and dBase.

You don't just get dull, one dimensional maps either. There are options for 3D versions, related maps, and multi-layered charts all of which are produced on screen in full colour.

All of this comes in a Windows-compatible. What-You-See-is-What-You-Get (WYSIWYG) bundle for ease of use.

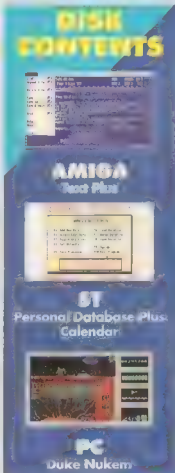
Price: £200
Availability: Now
Target users: Anyone with an interest in map making. Any business with a view to expansion.
Contact: GeoMem Software: 0250 3290

Perceived competition: There is no competition to this standard.

COVER DISK 6

Variety's the name of the game on this week's Express Cover Disk;

from playing around with text and data to beating an evil megalomaniac!



A lot of variety never hurt anyone, and with the Express Cover Disk this week you get a bit of it. Amiga owners can load, edit and print text files to their hearts' delight.

And for ST owners there are a couple of useful programs. *Personal Database Plus*, is much more than just a database as its name implies. Calendar is a handy desktop accessory that, unsurprisingly, acts as a calendar.

While Amiga and ST owners are playing around with dates and data, PC owners can play one of the best (if not the best) shareware games ever released for their machine!

TRI-FORMAT TECHNOLOGY

■ The software - for the three most popular 16-bit computers - is on a single 3.5-inch disk!

This is possible because of a special disk format developed for Express by Rob Northing Computing. The amount of disk space used for each machine changes from week to week, giving us the flexibility to allocate a large or small amount of space depending on whatever software deserves the most.

In effect, this means that in one week a particular machine may have more space dedicated to it than in another. Don't worry though: the next week the situation changes completely.

WHAT DO YOU WANT?

As Express we want to try and make the software on the disk the type of programs that our readers want. The only problem is, we don't know what that is! Do you want utilities? Applications? Games? A mixture?

Write in and tell us what you'd like to get, a general terms or more specifically. We'd like to know your thoughts. Send your views to Cover Disk Feedback, New Computer Express, 30 Monmouth Street, Bath BA1 2BW.

COVER DISK PROBLEMS

If you have a problem with the Express Cover Disk - that is, it's not broken, your machine has never been able to load it, or something else is seriously wrong with it - then send it along with an SAE to New Computer Express Cover Disk Returns, Disk 6, Disk Copy Labs, Unit A, Westmarch, London Road, Daventry Northants.

NH11 4SA. A replacement disk will be headed your way soon after - just don't forget the SAE!

If, on the other hand, you have a problem with the software on the disk, then send a letter explaining what happened into us here at Cover Disk Problems, New Computer Express, 30 Monmouth Street, Bath BA1 2BW. Apart from these problems, we're also interested in any hints or tips you may have to do with programs that have been featured on the disk.

Telephone enquiries regarding the Express Cover Disk should only be made on Fridays between 9.30am and 5pm. Because *New Computer Express* is a weekly magazine, there is simply no time to answer your calls outside those hours.

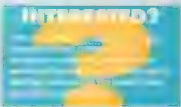
CONTRIBUTIONS

We're always on the lookout for software to go on the Cover Disk. If you reckon you've written a program which you think is worth putting on the Cover Disk, send the details in the box at the bottom of this page.

Then fill in the form on the bottom of page 15 and send us a copy of the program along with as much information about it as possible. And if we use the program, we'll pay for it: up to a whopping £1,000!

EXPRESS DISCLAIMER

While we strive to ensure that the Cover Disk is free of all viruses and that the programs on it work properly, New Computer Express does in no way accept any liability for any problems that may arise from using the disk or the programs on it.



EARN UP TO £1,000

We need your programs for the Express Cover Disk, whether they are utilities, games, applications or demos for any or all of the three supported formats - Amiga, ST or PC.

If you think you've written a program which other Express readers would find useful, interesting or just plain fun, then send it in! We're on the look out for any software for the Amiga, ST and PC, and if we use it, we'll pay for it - up to a maximum of £1,000!

As you all know, Express is a weekly magazine which means it comes out at least four times more often than the monthlies. So now you've got that many more chances to contribute your creation, earn some money and see your name in print.

GUIDELINES TO FOLLOW

1 Please document the software as much as possible. We'll be getting loads of programs and to have to work out how to use them all will take up what little time we have to put together a great disk.

2 Check for big mistakes in the program such as (any) bugs, errors, or file corruptions. If you find any, fix them and send the program in some other time. Just think: if it works, then we might even use it.

3 Check for little mistakes in the program such as misspelled words. This may take a little extra time, but it will look that much more professional.

4 Test everything before you send it in. If it's a dull disk then we won't be able to do anything with it, will we?

5 In the case of PC software, try to use CGA as well as EGA and VGA graphics, and even MDA (monochrome) if possible. Also, if the program uses a mouse, try to make it so that it is an option and not an absolute necessity. Basically, try to accommodate as many PC users as possible.

NB: Unfortunately we won't be able to return any disks sent in to us. Not even if you include a SAE. The monthly magazines can do that, but because we put out a disk every week there is simply no time to arrange anything along those lines.

Once you've done all that and filled in the form on page 11, send all your contributions to: Cover Disk Contributions, New Computer Express, 30 Monmouth Street, Bath BA1 2BW.

AMIGA

AMIGA INFORMATION

PROGRAM: Text Plus
DESCRIPTION: Text editor
DIRECTORY: TextPlus
FILE (S): TextPlus2.0E, TxP.Config, TxP2.0E.doc

TEXT PLUS

Text Plus are an important aspect of computing on the Amiga - they can be used for menu systems, startup sequences as well as anything else that requires a text file to run or make things move a little easier. Normally, when something like this has to be done, usually Workbench commands have to be used.

Until now, that is. Text Plus will enable all these things to be done and move it fast, with its printing capabilities it could even be used as a backup/restore program, used by those who don't need all the features of a more advanced (and more expensive) program.

LOADING TEXT PLUS

Before you do anything with the disk (by moving the icon in the top right of the disk so that you can see a hole through it) and then make a copy of it using the instructions in the Amiga Back-up Copy box elsewhere on this page. Always use your back-up copy whenever you load the program.

Once you have copied the disk, it's just a matter of inserting your back-up copy in your internal drive and waiting for the Workbench screen to come up. Then, once it has, double-click on the TxP-Format Disk icon, and then click on the TextPlus drawer icon to see the program's files.

Double-click on the TextPlus2.0E icon to run the program.

Text Plus documentation is on the floppy disk, double-clicking on the TxP2.0E.doc icon which will display it on-screen.

USING TEXT PLUS

The documentation that comes with the program fully explains what it is capable of.

Using the program is straightforward. As soon as it is run it can load text, or you can create your own. To load a file, go to the File menu (F) only can you load files from this menu, you can also Delete and Save files from here.

The Print function is also found in the File menu. When you decide you want to print a file, select Print and a window will pop up, giving you a choice of how

you want to print the text, which largely depends on what your printer is capable of. These options include printing in Near Letter Quality (NLQ) as well as some standard standard fonts such as Pica and Elite. You can also print just certain pages, choose whether the pages should be numbered, and set the length of the paper you are going to print on.

EDITING

Once you have loaded or input your text, for editing the file is as easy with Text Plus.

Blocks of text - that is, parts of the document that you have highlighted with the cursor - can be marked (marking you to copy the highlighted text to another part of the document, delete the block of text, or print it out). If you so wish, blocks of text from other documents can be loaded over the document you are working on, which means you don't have to break the text as over again.

PREFERENCES

The Preferences menu enables you to change a number of fundamental characteristics of the program. From this menu you can:

- set the length of the page
- set the width of the text
- turn the screen function on and off
- turn the screen mode on and off - Text Plus can run in either ASCII text or as a special format, created by the program.



When you decide to print a document, this is the straightforward options menu that comes up.

by the program. Files created by Text Plus have the file suffix: TAP.

- go to the location of a particular string of text
- go to a particular line number

STYLE

The Style menu enables you to arrange and print text in a variety of ways. You can set the type style of the text from a choice of Normal, Underlined, Bold and Italicized.

The way the text is formatted on-screen (and on paper) can also be set from this menu. TextPlus will align to the left of right of the page, or it can be centered or justified. There are also search and replace functions.

Effectively, Text Plus acts like a full-down word processor. While it doesn't have features like a spelling checker or thesaurus, it's a perfectly capable of loading and printing all but the most lengthy and complicated documents.

WHERE IT CAME FROM

Text Plus was supplied by Vally PD which specialises in Public Domain and shareware software for the Amiga. The company has a wide range of titles, covering all areas of Amiga software.

For further information, contact Vally PD at: PO Box 11, Peterlee, County Durham, SR8 1NZ. Phone 091 561 1155.



Loading and saving files is easy with TextPlus - everything's displayed on-screen.

AMIGA BACK-UP COPY

- 1 Start your Amiga with your Workbench disk.
 - 2 Take a blank disk and initialise it (instructions in your user manual).
 - 3 Now enter the CLI by double-clicking on the CLI icon that is in your System drawer on a standard Workbench disk.
 - 4 Then enter the following CLI commands to set up our working environment (remember to press **RETURN** after each. NB The **^** character is found at the top right of the Amiga's keyboard, next to the Backspace key. Press **SHIFT** to get the character).
- ```
MAKEDIR RAM:C
COPY C:\COPYDIR\DELETE RAM:C
COPY C:\MAKEDIR\INSTALL RAM:C
PATH RAM:C ADD
PROTECT RAM:C RWE
PROTECT RAM:C COPY RWE
PROTECT RAM:C DIR RWE
PROTECT RAM:C DELETE RWE
PROTECT RAM:C CHANGED RWE
PROTECT RAM:C INSTALL RWE
```
- 5 Once you have entered the commands and the drive light has gone out, take out your Workbench disk and

put your New Computer Express Cover Disk in the internal drive (DFD). To start copying, enter the following CLI command:

```
COPY DFD:0 RAM:
```

6 During copying, the machine will display a list of the files being copied. Once copying has finished, remove your Cover Disk and insert your newly formatted disk into the internal drive and enter the following commands:

```
COPY RAM:0 DFD:
```

```
DELETE RAM:0
```

7 That's the first part of the Cover Disk copied. The next step is a bit more tricky.

Finally, remove your copy disk and insert the Cover Disk into the internal drive. Enter the following:

```
DIR DFD:0 OPT 0
```

The Amiga should then display a list of all the directories on your Cover Disk which will look something like the following:

```
c (dir)
devs (dir)
l (dir)
```

```
b (dir)
```

```
s (dir)
```

Write down this list onto a piece of paper (the **dir** extension is not needed).

8 With your Cover Disk in the internal drive, each directory that was listed has to be copied individually from the Cover Disk onto your copy disk.

So, as an example, to copy the c directory you would enter:

```
COPY DFD:0 ALL RAM:
```

9 Now, remove the Cover Disk and insert your copy disk and type:

```
MAKEDIR DFD:0
```

```
COPY RAM: ALL DFD:0
```

```
DELETE RAM:0 ALL
```

Now repeat stage 8 for all the directories on the Cover Disk master. (So, in the CLI commands above, replace each instance of **c** with the name of the directory to be copied). Once all the directories have been copied you will have a successful copy of the Cover Disk.

10 The final step in backing up the Cover Disk is to install it to make it bootable:

```
INSTALL DFD:
```



## PERSONAL DATABASE PLUS

While its name implies otherwise, *Personal Database Plus* is more than just a database: it's also a text editor and label maker. The version included on the Express Cover Disk is a cut-down version of the full commercial program. Unlike other demos, though, this one will let you access all its functions and save data - its only limitation is that it can't hold more than 10 entries.

*Personal Database* is a popular database for the ST that was released as shareware. *Personal Database Plus*, however, is the upgraded version of the program and it is not shareware. A copy of the full program costs £19.95, or £12.95 if you are a registered user.

## LOADING PERSONAL DATABASE PLUS

Before you go any further, turn a copy of the Cover Disk using the instructions printed at the ST Back-up Copy box below.

*Personal Database Plus* will only run in medium resolution mode. So, if you're not already in that mode, go to the Options menu, select Set Preferences and change the resolution.

To load the program, insert your back-up copy into your drive, click on the drive A or B icon, depending on which drive the disk is in, and then click on the ST icon to open its folder.

Click on PERS.DB+PRG to load the program.

## USING PERSONAL DATABASE PLUS

When the program first loads, its main menu screen will appear. At the top, the program's main commands are accessible from this screen. Here is a breakdown of its functions:

## F1 - Add new data.

This is where a database can be started or added to. To duplicate a field from a previous record, then press F1. Once each record is complete, choose **ADD ANOTHER** entry. **SAVE & QUIT** to return to the main menu but keep the record in memory, and **QUIT (NO SAVE)** to abort the entry and return to the main menu.

## F2 - Scroll/Edit Data.

This enables you to edit and update the files in your database. You can use the arrow keys or the mouse to move around the database. The Edit option lets you enter or edit any of the data fields. To edit, use the following keys:

Cursor Up - Move to previous field

Cursor Down - Move to next field

Cursor Left/Right - Move left/right in field

Return/Enter - Move to next field

Ctrl Home - Move to start of field

Insert - Insert Space

Delete - Delete character under cursor

Backspace - Delete character at the left of the cursor

Esc - Clear field

F10 - Duplicate field from previous entry

F11 - Exit edit mode, save etc.

## F3 - Search utilities

This enables you to sort and update records in a number of ways. There are two main search options: **SPEED FIND** which is fast but will search only one field, and

**FILTER** which will examine all the fields.

You can output the results to the screen, **PRINT** (LIST) will fit all selected files to your printer, and **PRINT** (LABELS) will enable you to select the format and positioning of labels. **MALMERGE** will present you with a GEM window to select the required document you wish to use, and then presents you with another selection screen to enable you to decide what greeting and position for the data you require. **DISK** is for saving a data file to just the selected entries to disk.

## F4 - Set Defaults

This is where you set up your system according to printer type, label size and the address you wish to appear on mail merged documents. When you have made the selections you have the choice of whether saving your defaults so they are always there as set when you load the program or using the current defaults without saving them. About will ignore the changes you have made.

## F5 - Text processor

Before printing mail merged documents, you need to save the documents to disk. You can use any ASCII file that has the extension .DOC as long as it is no longer than one page.

The text processor is a basic and easy to use processor with all the commands visible at the touch of the **HELP** key. There is no automatic insert, but there is automatic word wrap and the size of tabs can be set. Other commands are:

Control + C - Centre text

Control + Y - Delete line

Control + U - Remove deleted line

Control + I - Insert a blank line

Ctrl Home - Move cursor to column 1

Shift Home - Move cursor to line 1

Cursor keys - Control cursor

ESC - Exit edit mode

To use the document in mail merge mode you must save it to a disk first.

## F6 - Load data file

When *Personal Database Plus* first loads there is no data in the file. This option will enable you to load a database from *Personal Database Plus* (.PDP), *Personal Database* (.PDB) or *Labelmaster* (.LAB). These are all demonstrations available from Bay Computers. Some demonstration files are included on the disk.

## F7 - Merge data file

Loading options are the same as above, but this will merge your selected file with the one already in memory.

## F8 - Save data file

When you have built a database you will need to save it. This option will present you with the GEM selector to name the file. Use whatever name for the file that you wish, but make the extension at the end of the file .PDP.

## F9 - System

This will tell you what system you have, what version of

## ST INFORMATION

**PROGRAM:** Personal Database Plus

**DESCRIPTION:** Application

**FOLDER:** ST

**FILE(S):** PERS.DB+PRG, SAMPLE.DOC,

TEST 100.PDP, MANUAL.TXT, SYSTEM

(folder)

**PROGRAM:** Calendar

**DESCRIPTION:** Desktop accessory

**FOLDER:** ST/CA17

**FILE(S):** CA17.ACC, CA17.DOC,

CALSHOW47.PRG, CALSHOW.DOC,

CALSHOW.PTX, CSZAP47A.TTP,

CSZAP47A.TXT

GEM, what TOS, if your printer is on-line, etc. This is more of a novelty than anything else.

## F10 - Exit program

When you're finished using *Personal Database Plus* this is the way to exit the program. It's a good idea to use this way of exiting the program instead of **resolving** for example, as you are reminded if you have updated your data file and need to save the new version.

## FOR MORE INFORMATION

*Personal Database Plus* is produced by Bay Computers who can be reached at: 3 Tesse Walk, Morcombs Lane, LA3 3QJ. Phone: 0524 831162. The full version of *Personal Database Plus* is available for £19.95.

## CALENDAR

*Calendar* lets you attach events to any day of the year according to the date or what position a day holds within a particular month.

When *Calendar* loads, it reads the current date from the system clock and checks to see if any significant events are happening during the day.

If there is anything happening then *Calendar* will tell you, audibly if it loads as an ACC (that is, a desktop accessory).

Also on the Cover Disk is *Calshow*, a companion program to *Calendar*. This is an AUTO program that reads events from *Calendar* and displays the next 22 events on-screen.

*Calshow* can also be run as a TTP. When it is it has many functions, including printing out a list of upcoming events, saving the list to a disk file, specifying a cut off period (in days) for displaying events, specifying a maximum number of events to list, specifying the starting or ending date for the display telling *Calshow* where to look for *Calendar*, and showing only significant events or all of them.

Another companion program is *CSZAP47A.TTP*. This can put a new cut-off value into *Calendar*. The normal value is ten days, so normally *Calshow* will display only the events happening in the next ten days. This can be changed by *CSZAP47A.TTP*.

There is documentation on the Cover Disk for all three programs, explaining how to use and install them.

## ST BACK-UP COPY

**1** Format at least one blank disk.

**2** Write protect the original Express Cover Disk (with the notch open so you can see the hole through the disk) and insert it into the drive. If you've got two drives, insert the Cover Disk into drive B. Double click on the drive B icon to open a window showing the contents of the Cover Disk. If you've only got a single drive a message appears asking you to put disk B in drive A. Just click on OK.

**3** Insert one of the blank formatted disks into drive A (removing the Cover Disk if you only have one drive).

Double click on the drive A icon and open up another window. You may be asked to insert disk A in drive A - you already have, so do nothing and click on OK.

**4** Highlight the ST folder in the drive B Cover Disk window and drag it into the drive A window.

**5** If you only have one drive, you're asked to insert disk A and disk B at regular intervals. Be careful not to mix the two disks up! Remember, Disk B is the original Cover Disk and disk A is the newly formatted blank disk.

**6** Don't try to use the standard Alari disk copy (dragging floppy A onto floppy B) function as it won't work.

## PC

## DUKE NUKEM

The bounds of shareware gaming have been pushed even closer to commercial software with the release of *Duke Nukem*. The program's features contain this: high speed animation, hilarious scoring, hundreds of screens, secret rooms and treasures, built-in hint mode and instructions, joystick and keyboard support.

*Duke Nukem* is another game produced by Apogee Software in the US which also brought out *Captain Comic* and *Commander Keen* which were featured on two previous Cover Disks. All of these games are published and distributed in the UK and Europe by Precision Software Applications (see address below).

## TO START THE GAME

Before you do anything with the Cover Disk, write protect it by moving the notch at the top right of the disk so that you can see a hole through the disk. Next it is important that you make a backup copy of it - use the instructions in the PC Back-up Copy box below on this page.

## DE-ARCHIVING

To make things a bit easier for PC owners, we've made the de-archiving of the software an automatic process. Included on the disk are two files, *INSTALL.BAT* and *NCE\_PC.EXE*. Don't run *NCE\_PC.EXE* - it will try to de-archive itself back on to the Cover Disk which will be completed if it's not write protected.

Due to its size, *Duke Nukem* can only be installed on a hard drive; it simply is too big to fit on a floppy disk. *INSTALL.BAT* is, as its name suggests, the installation program. To run it, just type *INSTALL*. It will come up with brief instructions explaining how to de-archive the programs to your hard disk. To install the program, simply type *INSTALL C:* or *INSTALL D:* depending on how your hard drive is assigned.

What the program does is to de-archive the files to the other drive. In doing so, it will create its own directory and even provide a menu for you to run the software from.

## PLAYING THE GAME

You play the role of super hero Duke who's been called in on a special mission to save the world! Dr Proton, a brilliant nuclear scientist, plans to take over the planet and has created a large army of Techbots to help him. Your mission is to stop Proton and his army.

This is the first program in the *Duke Nukem* trilogy and is entitled *Duke Nukem: Shrapnel City*. In this game Duke enters a demolished city and has to find Proton's underground fortress.

In the second episode, entitled 'Mission Moonbase', Duke follows Proton as he rockets to his secret base on the moon to plan his final attack.

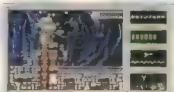
And in the third and last part of the trilogy called 'Trapped in the Future', Duke chases Proton into the future on Earth where their ultimate conflict takes place.

## KEEPING IN CONTROL

Duke's an athletic chap and can flip, cling to ceilings as well as use his nuclear pistol to blast away Dr Proton's nuclear reactors. For further details on Duke's abilities look at the program's built-in instructions.

*Duke Nukem* can be controlled by either keyboard or joystick. The keyboard controls can be re-defined to suit the player but as they stand they are:

- Left arrow** - move left
- Right arrow** - move right
- ALT** - fire gun
- CTRL** - jump
- The up arrow key is the action key enabling Duke to:
  - activate elevators, teleporters and time machines
  - read notes or monitors
  - open doors
  - insert access cards, keys and other useful objects



• Our brave hero Duke battles against the evil forces of Dr Proton and his tin men

## PC INFORMATION

**PROGRAM:** *Duke Nukem*  
**DIRECTORY:** PC  
**DESCRIPTION:** Game  
**FILE(S):** *INSTALL.BAT, NCE\_PC.A*

*Duke Nukem* can only be installed on a hard drive

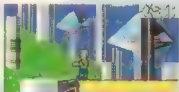
**NOTE:** MS-DOS must be loaded on your system before you use the Cover Disk

The further you get in the game, the more often you will use the action key.

## HOOKED?

If you reckon *Duke Nukem: Shrapnel City* is a great game, you can obtain the other two games in the trilogy by contacting Precision Software Applications at Tarmwood, 10 High Street, Tadlow, Nr Royston, Herts SG8 0ES. Phone: 0767 23302.

The first *Duke Nukem* program, as featured on the Express Cover Disk is shareware. The other two parts of the trilogy are available for £24.44 each (plus £2 postage and packaging), or all three games can be bought for £34.86 (plus £2 postage and packaging). As well as the games, you'll get a special 'Prints and Tricks' booklet, a secret mode password and several other bonus games.



• Keeping watch over the city, Duke takes a break from the furious fire battles

## PC BACK-UP COPY

- 1 If you've only got a floppy drive-based system, format at least one blank disk. Otherwise use your hard drive.
- 2 Write protect the original Express Cover Disk (with the notch open so you can see the hole through the disk).
- 3 Use the XCOPY command to make the backup. If you have only one floppy drive, load XCOPY from the system disk from drive A: with the /S option to copy the files across. So, to copy the files across type: XCOPY

A:\PC\\*.\* B:\. Then it is just a matter of swapping disks in and out of the drive until the Cover Disk is copied. Don't worry if you think you must have two drives - the XCOPY command will treat your single drive as both, or it will copy to the B: drive if, in fact, you do have two drives.

4 If you have a hard drive, put the Cover Disk in drive A:, then type: XCOPY A:\PC\\*.\* C:\. To copy all the subdirectories to the hard drive.



## FANCY CONTRIBUTING? THEN FILL IN THIS

NAME

.....

ADDRESS

.....

TELEPHONE

(day)

(night)

COMPUTER: Amiga Atari ST PC The name of the program is:

SIZE OF FILE(S): 1 K

TYPE OF SOFTWARE:

Business application  
 Game  
 Music program  
 Novelty

Technical utility  
 Art program  
 Educational  
 Other

BRIEF DESCRIPTION

.....

CHECKLIST:

README.DOC file included on disk  
 Printout of README.DOC (if possible)  
 Disk is labelled with your name, address, phone number  
 Disk is certified virus free

**DECLARATION:** This program is submitted for publication by New Computer Express. I have totally written it myself, and I agree to indemnify Future Publishing against any legal action that may arise due to copyright problems.

SIGNED:

DATE:

# PUBLIC DOMAIN

## GREAT SOFTWARE

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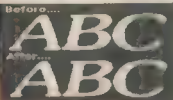
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## ON A SCREEN NEAR YOU...

**PRODUCT:** Font Enhancer**COMPATIBILITY:** Amiga**FROM:** H B Marketing**CONTACT:** 0753 686000

• Smooth out the jagged edges on fonts with Innovation's new Font Enhancer

Any DPaint user will tell you, reducing the size of a bitmapped font can often result in a serious loss in quality. This is OK for bitmapped images, but if you intend to use the fonts for video work, the results can often be less than satisfactory.

A new product just out is Font Enhancer from Innovation in the US. Designed specifically for use with its video-tiling package Broadcast Tiler 2, the Font Enhancer attempts to improve the quality and resolution of standard Amiga bitmapped fonts. It can also reduce these fonts to any point size lower than the source font, anti-aliasing the font to reduce the loss in quality. They are then saved out in Broadcast Tiler format.

Font Enhancer can also be used to create a family of font sizes all derived from a single Amiga font, thus making it ideal for reducing over-sized Amiga fonts into a complete range of useful sizes. Although the resulting fonts cannot be used directly with programs such as DPaint, a conversion tool included with Broadcast Tiler will convert them back to Amiga bitmapped font format. Unfortunately, this step often kills their anti-aliasing, making them almost useless. The quality of the enhanced fonts is very good making the program

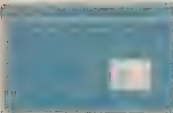
attractive to owners of Broadcast Tiler 2. However, its appeal is limited and would have been better if support for Amiga colour fonts had been built in. As it is, Broadcast Tiler 2 owners are about the only people that will find it of any use. Definitely a missed opportunity. ■

**WILL IT WORK FOR YOU?****FOR**

- ▲ Smooths edges when reducing fonts
- ▲ Cheap way of adding fonts to Broadcast Tiler 2

**AGAINST**

- ▼ Slows down when with larger fonts
- ▼ Enhanced fonts can only be used with Broadcast Tiler 2
- ▼ Cannot enlarge fonts

**COST:** £130 **VALUE:** Fair**COMPETITION:** None known**PRODUCT:** Interspread**COMPATIBILITY:** Amiga**FROM:** CentreSoft**CONTACT:** 021 625 3302

• Keep all those numbers under control with CentreSoft's new Interspread spreadsheet for the Amiga

It's always nice being able to play all those wondrous Amiga games, but even the most playful Amiga owner must occasionally get serious. Whether you're managing your bank account or running a small business, you Amiga can help you keep those facts and figures under control.

One of the most useful business tools is the spreadsheet: a program that can take the drudgery out of working with large amounts of numbers. Several spreadsheet packages are available for the Amiga, the most recent being Interspread from InterActivision. Having already produced a damned fine word processor (reviewed in Express 150), InterActivision's Interspread could well be a winner.

Like all spreadsheets, Interspread uses the now familiar grid format that was pioneered by SuperCalc on the PC. Each 'cell' within the grid can contain either a number, a string or a formula. With 30 million cells available, it's unlikely that you'll feel held back by this program. What's more, its user interface is an absolute joy to use, so all that power is easily controlled.

InterWord supports live mathematical operators including exponential notation (to the power of), multiplication, division, subtraction and addition. You

can mix and match these to produce some quite complex formulae. The program also supports a full macro facility, making complex operations considerably easier.

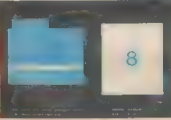
Interspread may not be the most exciting program in the world, but it's certainly an exciting spreadsheet (if such a thing is possible). Combining ease of use and power with a price tag anyone can stretch to, Interspread is well worth investigating. ■

**WHAT DOES IT OFFER?****FOR**

- ▲ Very easy to use
- ▲ Cheap for what it has to offer
- ▲ Manual is excellent

**AGAINST**

- ▼ Graphing functions are a little limited

**COST:** £50 **VALUE:** Excellent**COMPETITION:** Advantage, K-Spread**PRODUCT:** LabelPro**COMPATIBILITY:** PC**FROM:** Avery Office Products**CONTACT:** 0628 39911

• LabelPro - ideal for small businesses to use as a simple mailmerge program

Unlabelled disks, tatty address labels and the nightmare of mailmerging - if you have a laser printer, these could be problems in the past with Avery's new label printing software.

LabelPro is simple to install and easy to use. It can print a wide variety of labels and a library of clip art enables you to add a distinctive, personal touch.

The program is entirely menu driven, which makes designing a label a simple process. The type of label is selected first - there are 16 to choose from - and then the text and graphics are entered. A range of text sizes and fonts is offered for, and an excellent preview option displays your masterpiece before you commit yourself to printing.

Producing mailmerge labels is as easy as producing disk or video cassette labels. Instead of entering text, you tell LabelPro which database file to use, and then select the appropriate fields. LabelPro has its own simple database, but addresses can also be merged from dBase, Microsoft Word, WordPerfect and Wordstar.

The clip art library is limited, but any graphics in PCX or PCC (such as graphics from DPaint or PC

Paintbrush) format can be added to it. The initial printer set-up procedure is cumbersome, but it does help you get the most from both printer and software.

LabelPro is ideal for small businesses that need a simple mailmerge program, and it may even save on stationery costs. But it is probably too specialised for home users.

**BONUS TO BUSINESSES****FOR**

- ▲ Simple and efficient
- ▲ All labels used by the program can be purchased from Avery

**AGAINST**

- ▼ Label sizes cannot be altered
- ▼ Only supports laser printers

**COST:** £110.45 **VALUE:** Fair**COMPETITION:** None known

**PRODUCT:** Unmouse  
**COMPATIBILITY:** PC  
**FROM:** Picture Perfect (UK) Ltd  
**CONTACT:** 0264 333643



• For computer users on the move the Unmouse doesn't need a flat surface to work on

**A**s its name suggests, the Unmouse is a mouse that isn't a mouse. It is a touch-sensitive tablet that provides mouse-like cursor control, without the need for loads of space on the desktop.

The tablet connects to a serial port on the PC, just as a mouse would, but it may need more electrical current than that supplied from the serial port. Cables are supplied which enable the Unmouse to commandeer some power from the keyboard.

The Unmouse drivers are easy to install, and the manual provides full instructions on how to alter the set up of Windows for use with the Unmouse.

Moving the cursor is simple – just move your finger or a stylus across the face of the tablet. It is a little difficult to get the hang of at first, but it soon becomes much easier than using a mouse for simple pointing.

The Unmouse has several modes of operation designed for different uses. The two basic mouse modes will probably be the ones that are used the most, but the absolute modes are excellent for precise drawing and pointing. In absolute mode a position on the tablet represents the same position on the screen. For example, if you point at the left-hand corner of the tablet, the cursor will jump to the left-hand corner of the screen. It takes a while to get used to, and it requires perseverance before you can get the best results from

your graphics package. The trackball mode is similar to the mouse mode, except that the cursor will continue to move after you move your finger off of the tablet.

Laptop users, who use their computer on the move, will find the Unmouse particularly useful, because they will no longer have to struggle to find a flat surface for their mouse. The Unmouse is well worth a look if you haven't already bought a mouse. But if you do have a mouse, the Unmouse may not be a sufficient improvement to justify the cost. ■

## MORE THAN A MOUSE?

### FOR

- ▲ Easy to install
- ▲ More sensitive than a mouse
- ▲ Excellent for users on the move

### AGAINST

- ▼ May not be worth the investment if you already have a mouse
- COST:** £159.80 **VALUE:** Good

**COMPETITION:** Any mouse or trackball

**PRODUCT:** Trackman 2  
**COMPATIBILITY:** ST  
**FROM:** Hollis Research  
**CONTACT:** 0481 28286

How fast can you play? (The Trackman 2 is a MIDI sequencer.)



• Making music doesn't need to be a computer-generated headache. Trackman 2 does it the way musicians do it – simply

**F**or too long the price of MIDI sequencers has been astronomical, largely to recoup development costs from frustrated musicians who need them. But Trackman 2 is a MIDI sequencer created by a musician for musicians – with the emphasis on features, rather than price. For your money, you get a package which can turn a humble piano-basher into a virtual virtuoso.

Trackman 2's approach differs from most other MIDI packages in that it's laid out as a studio mixing desk. Instead of complex pattern lists, you have a simple 16 track desk, complete with volume sliders and solo/mute buttons. Each track can play or record on any MIDI channel, and can be tweaked, limited and re-recorded without affecting any other.

For songwriting, Trackman 2 is superb. Its intuitive menu-operated features give you full control over a wide range of effects and editing functions. Tracks can be examined, instrument by instrument, and then altered using the mouse, or the MIDI keyboard itself. Even critical timing errors can be cured using a single keypress to line all the dodgy notes to the nearest beat, half-beat, or any other position.

You can record your tunes in different ways – Step-time writing (placing each note in position on a grid) stops those infuriating moments when your sense of rhythm goes, while real-time writing (where you play the

tune live) can be set up to align the notes as you play.

Once your first instrument track is safely down, you can overlay more instruments, using each one as a cue for the newer ones, just like a real studio mixing desk. When you've got all your sounds, you can edit notes and bounce tracks around with the precision.

Songwriting with Trackman 2 is about as easy as it will ever get. And you don't need to hock your drummer's kit to pay for it. ■

## IS IT SOUND?

### FOR

- ▲ As easy as falling off a stage
  - ▲ Results can be obtained quickly
  - ▲ Powerful features at a low cost
- AGAINST**
- ▼ Doesn't show music on a proper stage
  - ▼ Can't highlight the note playing

**COST:** £179 **VALUE:** Excellent

**COMPETITION:** C-Lab Notator, C-Lab Creator, Cubase, Steinberg Pro-24, Sequencer One

**PRODUCT:** Protext v5.5  
**COMPATIBILITY:** ST  
**FROM:** Arnor  
**CONTACT:** 0733 68909



• Protext gets another facelift and comes back more stylish and more powerful than before

**M**ost people take Word Processing for granted – all you need is a package which you can type into and then use to generate a hard-copy on paper. Simple. But Arnor knows this it isn't stop there. Without going the whole hog and moving into DTP, there are still corners which can be "smoothed off" to make word-processing an easier, quicker operation.

Protext 3.5 is the next step in the direction of the "paperless office". It combines simple GEM-style menus and their inherent ease of use, with other methods like keyboard short-cuts, as found in prehistoric PC word-processors like WordStar and MSWord.

A bewildering array of features awaits you in Protext 5.5: a word counter, a spelling dictionary (which can even check as you type), a calculation evaluator (for writing sums which can be proved to work), a index and contents generator, an auto-sens (a real lifesaver), and even an anagram generator.

But all these features first appeared on Version 5 of Protext, nearly last year – what's new for 5.5? A thesaurus, revised dictionaries and hyphenation commands, that's what. These new features form part of a much-improved system, one that's been tailored to fit its users. It's now possible to avoid those moments when you can't think of another way of expressing yourself – a simple key command gets the thesaurus working, looking for synonyms.

But that is by no means it. Protext 5.5 also features

an improved copy function, which can now alphabetically list the words you used in your document and indicate how many times they appeared. Business people will find the mail-merge improvements useful – Protext 5.5 can read Prodata database files directly, making direct-marketing mailshots a doddle.

Whatever your requirements, Protext 5.5 can handle them. It's powerful, well laid out, and easy to use. After just a short time using Protext 5.5, you'll wonder how you ever did without it for so long. ■

## IS IT WORTH BUYING?

### FOR

- ▲ Clear concise menu operations
- ▲ Loads of high-powered features
- ▲ Quick and efficient to use

### AGAINST

- ▼ Occupies four double-sided disks
- ▼ Complex installation for hard drives

**COST:** £152 (£30 upgrade)

**VALUE:** Good

**COMPETITION:** 1st Word Plus, Write On, Thar's Write, Script



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# Amiga Public Domain Software

**KEY TO ABBREVIATIONS:** (2) = Number of disks in set; \* = 1 meg, \*\* = 2 meg, (2D) = 2 drives; (X) = Adults Only

## DEMOS / ANIMATIONS

- 296 Unleash Animation \*
- 299 NewTex Demo 3 (2)\*
- 450 Elvis Demo \*
- 460 Predator Megademo (2)
- 744 Red Sector CxH Demo \*
- 747 Popeye Master The Beasoots
- 770 Shrek Animation \*
- 825 Subliminal Megademo (2)(X)
- 850 Dragons Lair Demo \*
- 865 Coma Demo \*
- 895 Trip To Mars
- 907 Scooper Mental Hangover
- 956 Madonna Cartoon Animation \*
- 954 Tortles Demo
- 1001 Station at Kham (2) \*
- 1033 AJ The Money Anim \*
- 1125 Dinosaur Newsreel Demo
- 1180 Pilot The Fish
- 1200 Raiders of the Lost Ark Anim \*
- 1236 Bubble2 2
- 1298 Evil Dead Demo (2) \*
- 1433 Mary Antennas (2)(X)
- 1540 Army vs. Walker Anim \*
- 1541 Balmain Animation \*
- 1551 Top Much 3D \*
- 1552 Megalodon Animation V2.0 \*
- 1650 Phenomena Enigma Demo \*
- 1620 Do the Bart. Man \*
- 1650 Cronica Total Destruction \*
- 1664 Slime Blue House (2) \*
- 1675 More Crazy Animals (2)
- 1697 Subliminal Animation \*
- 1701 Ten Animation (2) \*
- 1703 Total Respyr
- 1704 Total Recount
- 1725 Total Respyr
- 1708 Total Recall
- 1707 Deaky (Gangster) Demo \*
- 1763 Uke Of Eden (2)
- 1766 Laurel & Hardy (2)(2D) \*
- 1775 Total Corruption \*
- 1787 Carrot The Chicken (2)(2D)
- 1794 Carrot Inanna (2)(2D)
- 1816 Carrot Madness (2)(2D)
- 1820 Magnetic Policy Demo \*
- 1823 N-n-n-n-n-n-n-n-n-n
- 1824 Agamen Animations 33
- 1824 Agamen Animations 34
- 1837 Plasmoid Demo \*
- 1838 Gadget Frank Demo \*
- 1841 Anti-Laminar Demo (2) \*
- 1846 Phenomena Interscape
- 1846 Gattuso Megademo
- 1846 Thelma Demo \*
- 1848 Enterprise Animation (2)(2D) \*
- 1850 The Well (2)(2D) \*
- 1856 Betty Boop Anim / Sideshow
- 1877 AM2D 3D Demo \*
- 1881 Mike Tyson Knockout Clip
- 1888 Robocop Animation \*
- 1890 Shredder Animation \*
- 1900 Shitless Ice Demo \*
- 1902 Tomcat's Virtual World
- 1920 Sex Wars Demo (2)(2D) \*
- 1920 Demo Dirty Park 4 \*
- 1920 Victor Dance
- 1943 Whorewar Animation (2) \*
- 1947 Mr. Potato Head \*
- 1949 Mr. Potato "Only Love Up" \*
- 1950 Super Woman Animation \*
- 1956 Cleasara Comforts Demo

## GAMES

- 315 Return To Earth
- 466 How Gray Adventure \*
- 482 Wanderer
- 648 Star Trek (USA) (2) \*
- 800 Learn & Play (2)
- 797 Star Trek (Victory) (2)
- 788 Treasure Hunt
- 857 Pipeline
- 902 Origi
- 981 Snakepit
- 981 Jockey \*
- 1004 Galaxy Disk 9
- 1113 Wolf Slayer Games
- 1200 Dragon Cave
- 1245 Rings Of Zen \*
- 1408 AT050 Super Quiz
- 1410 AR050 Super Quiz
- 1510 Rock-A-Like Puzzle (2) \*
- 1512 Picture It (2) \*
- 1517 APD110 Creatore \*
- 1520 APD115 Saboteur \*
- 1526 APD130 The Wizard Ball \*
- 1531 Simon Says / Special Maths
- 1530 APD137 Top Trek \*
- 1533 The Jet \*
- 1536 Megademo \*

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- 1578 APD148 Fruit Machine \*
- 1580 APD149 Gobbi / Pontoon \*
- 1584 APD155: Master Control
- 1581 APD160 Outlander \*
- 1588 APD178 Megademo War Up \*
- 1610 APD180 Dungeon Center (2)
- 1612 APD182 Pale Kingdom (2)
- 1616 "Gripesque"
- 1700 Wheel Of Fortune
- 1860 Virtual Dice One
- 1700 Turret Line 2 (2D)
- 1711 Mental Image Games Disk 1
- 1715 Frantic Freddie
- 1720 Cantor Asteroids
- 1748 Ward Games Volume 1 \*
- 1747 Ward Games Volume 2 \*
- 1748 Strategy Games \*
- 1749 Truck'n'War \*
- 1760 Arcade Game Chess 1
- 1761 Serene 2
- 1827 Son Haters
- 1832 Pom Pom Gunner \*
- 1879 Sea Lance \*
- 1882 G.E.U.C. (Gripesque Game)
- 1885 Brink 16 \*
- 1895 J. Nicholas Coast Disk 1
- 1918 Air Ace \*
- 1926 Napoleonic Warfare System \*
- 1945 Island of Hesperia Adventure
- 1948 Dungeon Master Companion

## MUSIC

- 002 Awesome Sounds
- 007 PSX Suburbs
- 081 Definition J. M. Jans
- 087 Power-Surge
- 108 Amiga Chant 3
- 106 Vangelia \*
- 107 Crusaders Audio X
- 200 Sound Area 2
- 217 Sex-n-Up Hup Music
- 407 CD Player Demo \*
- 408 Crusaders - Fresh'n Out!
- 418 Electric Youth (2)
- 437 Amiga Chant 3
- 552 Music Invasion 3 (2)
- 654 Powerhouse Power Music 2
- 710 Digital Content IV
- 713 "Fish" Queen
- 724 Backmaster Club Mix
- 724 Technobus Remix
- 748 Crusaders - Backline
- 824 Digital Content V
- 896 Sonic House
- 898 Pan 3 Music Disk
- 914 Special Brothers Music 2
- 935 Megademo - Harley Harley
- 940 Hatched Out Series
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- 990 100 GEM Games Tunes
- 970 The GEM's Strip Music
- 970 Scorpions - Bass Songs

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- 1894 Art Of M.C. Music Disk
- 1908 Seal - Crazy Rave \*
- 1908 SEIF - Sounds Of Digital
- 1715 Soaked Out V1
- 1716 Soaked Out V2
- 1718 Three Wires Above Noise
- 1717 Everybody Dance Now
- 1718 Betty Boop - Going The Do
- 1750 Amazing Tunes 3 (2) \*
- 1760 Amiga's Gallant Knight (2) \*
- 1772 Tapan Music Disk (2)
- 1776 Crusaders - Street Music
- 1777 Megademo Technology
- 1787 Magnetic Beats 2
- 1788 Magnetic Beats 3
- 1821 Academy Music Collection
- 1820 Reflections - Best Of (2)(2D)
- 1824 SEIT Music 2
- 1828 Sgt Pepper Revisited (2)(2D) \*
- 1831 Vexa Music \*
- 1831 Computer World Music 3 \*
- 1827 Here Comes The Hammer

## SLIDESHOWS

- 030 J.O.E. Sideshow 2
- 078 Valley Fantasy Art (2)
- 084 Mega Art Disk
- 183 NASA Sideshow
- 187 D'Neven Sideshow
- 171 Patrick Nagel Pictures
- 185 Eichel Sideshow
- 280 TV Sports Datasheet
- 282 Foreign Rooms
- 289 Ruger Ocean Sideshow
- 301 Marx Art Disk 1
- 411 Theatrical Portfolio (2)
- 512 Utopia - Photomontage 1
- 513 Utopia - Photomontage 2
- 617 Neofuturist Sideshow
- 725 Daga Pages (2)
- 742 Madonna Sideshow
- 787 Connersway Sideshow
- 718 Look At Me! 3D
- 814 Vix Sideshow
- 831 Utopia Carlson Sideshow
- 832 Utopia - Photomontage 3
- 863 Screen Queens (2)
- 918 Sun Side lit
- 911 Crispwheat
- 988 Madonna Sideshow 2 (2) \*
- 915 Art's Digipix \*
- 931 Heroic Dreams
- 947 Garfield Sideshow
- 956 Scorpions Sideshow
- 1044 Sunset Island Sideshow
- 1001 Total Recall Sideshow

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- 1103 GEM's Of Sports Illustrated
- 1210 Turtles Sideshow
- 1263 Crusaders - Richter (2)(2D)
- 1272 Madonna - Photopix
- 1277 Fantasy - Divine Visions (2) \*
- 1279 Foreign Rooms 3D \*
- 1763 Mercedes - Chrysler 1 (2) \*
- 1846 The Age Of Slack
- 1823 Ark Williams Demo
- 1540 DayWalker - Digipix 1
- 1547 DayWalker - Digipix 2 \*
- 1548 Madonna Sideshow 3 \*
- 1866 Jigsaw 3D
- 1708 Invader World Sideshow
- 1716 Vixie Debut Sideshow
- 1785 Reflections Ray-Traced
- 1835 Night Breed Sideshow
- 1866 Van Renswale Sideshow
- 1785 Reflections Ray-Traced 6
- 1891 Levee Island Sideshow
- 1918 Debut Harry Sideshow (2)(2D) \*

## UTILITIES

- 091 Uke Word Processor
- 119 Amiga MACD
- 182 Replicator Clip Art
- 210 Icons!
- 236 Ultimate Bootdisk CxH (2)
- 343 TV Graphics (2)
- 353 Smokey 3.0 (SS map)
- 410 DPaint Canvas Brushes
- 442 DPaint Forms (2)
- 456 Ham Radio Utilities (2)
- 548 Iconmaker!
- 571 JazzyFont Utility
- 580 Dope Into Water
- 591 Business Card Maker
- 595 Amateur Radio Disk
- 620 AGD (Messy) OGS
- 622 CD Master
- 661 Programming Disk
- 682 Sound Applications (2)
- 684 Video Applications (2)
- 685 Video Applications (2)
- 691 The Comics Disk
- 692 QED Text Editor
- 701 Notes/Player Vlog 1
- 704 Prophecy - Color Map 1
- 1060 Datasheet Workshop (2)
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- 1690 PageSetter Clip Art (B)
- 1614 Sideshow Construction Kit
- 1647 Master Virus Killer V2.2
- 1647 James Bible (2)
- 1654 Calico Demo Maker
- 1650 RSI - Demo Virus (Virus Gcd)
- 1661 RSI - Demo Utility-Help (2)
- 1902 TDS 3D Vector Designers V1.1

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# EXPRESS MAIL

Express Editor, Andy Storer, continues the debate on cover disks and asks whether PCs are really taking over the world in the liveliest letters pages in the weird and wonderful world of computing.

## Cover swaps

Congratulations on your new "format" Cover Disk.

Despite being on a tight budget, I am more than happy to pay a little extra for your magazine, for such ease of use disks, unlike other magazines that seem to expect one to be super human to extract information, to make a working copy.

However at the risk of wanting "Jem on it", so to speak: I am using an STE, I Meg and would have liked to have had Base A/China Challenge issue 148 for the STE user.

I am more interested in such things as Base and more serious things like chess, etc. and I missed the look of the China Challenge, (don't get me wrong!) I also like playing games.

As someone 'new to computing', is there any way I could purchase some equipment to be able to convert information for this Amiga Cover Disk to work on an STE? (I know someone with an Amiga).

Should the answer be no, then perhaps in the future you could "repeal" various items for the other users of the Amiga to help.

S J Long Swinton Wals

**BE AFRAID YOUR** request is a difficult one. SJ and one which, if it could be resolved, would make us solve a great deal of money.

Put simply, programs designed to run on one machine will not run on another, unless there's a specific version that's been written to conform to that machine's operating system. And unfortunately, the software you mention is machine specific.

There is a half-way house solution open to you, however. You could run the PC programs if you bought a PC emulator for your STE - something like the Vortex or A/Onion plug-in boards that effectively turn it into a PC.

Alternatively, but rather more drastically, you may wish to sell your Amiga and buy an Amiga - this way you could then buy both ST and Amiga emulators and run just about all the software on the disk.

**ADOPTING HARRY ENFIELD** voice, I just couldn't believe it... this disk loads up and all it has is a game demo... what's that all about then? I just couldn't believe it.

Well Harry, unfortunately an agreement between all computer magazines and the European Software League Publishers Association means that none of us can run full-length games anymore. Sales suffer and all that. So in the meantime, demos are all you're gonna get. Well, you make sure you get the best ones!

## PC power

**As your Figure of Fun** feature in Express 150 - surely the most in your report is that after 18 years the PC has finally become what IBM originally intended - a home computer.

John R Hudson, Huddersfield

**YEP THAT'S ABOUT** the size of it John - just a pity that none of IBM's own PCs have yet managed to become home computers though, isn't it? Is this the ultimate price of piracy?

## PC games

I read the debate on the "Sugar Baby" with great interest and agree with Simon Dullingham. There are indeed other £1,000

PCs which offer exceptional value for money and good expansion if needed. In a recent interview of 386's the "Shopper" lab report gave "Best Buy" for performance to the T10 PC 320, and so wonder!

Just a brief look at the specifications, including the excellent pro-designer video display, 20MHz and 43Mb hard disk, all for £1,099 plus VAT (£1,291 total, delivery free), would make anyone look twice. Come to that it was a surprise to see the Amstrad 3855X still rated as best buy because of the possible advantages of High Street prices against the set prices of direct supply.

This factor does need to be taken into account - good dealer services are (sometimes) worth having as are their occasional "offers".

The main drawback with PCs and games is lack of sound. I have a friend who has just made me weep with envy. He runs

Microsoft's FS4 on his new 386Hz 386DX VLSI 16 M 55 colours and SVGA. Still lying a sim plane with an engine that sounds like a damp squib, surely can't compare with the roar from a racing throttle on the Amiga 500.

The need to purchase a separate sound board and mini amp with stereo speaker adds another £170 to the overall cost of PCs. But it looks like Sugar has put this into his new Games PC as a sweetener to make us think.

It has been a snag in the development of PCs right through. Even when the first CPC came out, you could make music on it and even produce something like a voice synthesiser. And look what the Amiga can do, and at such a competitive price!

And so the battle goes on. We're the lucky ones: it's up to them to deliver the goods! Thank you for your interesting pages, "Letters" and "Tech Tips" are the lifeblood of the magazine. And now we get a 50p disk too! Ever so Taaa!

John Gray, Eastbourne

**I MUST CONFESS** I've been playing rather a lot of PC games recently - mind you I have one of those A+16 stereo cards so sound's not a problem.

It's increasingly dawned on me that the PC is the most useful machine around - all things told - if you have the dash to transform it into something approaching a modern computer.

## Cover lover

It's times like this I'm glad I saw you in the shops. NCE has been a life-saver to me.

Nearly every computer mag comes out once a month which is no good as you get fed up sitting around like a wet weekend. Some mags are not ill to go in the shops. For example I bought a ST Fun a few weeks ago costing me a fiver! I turned on the computer and found the worst game ever!

Another thing I can't stand are demos. Once you've played one level that's it. I wish we thank NCE's cover for bringing it to my sight.

Seth Edwards  
Holwell, W. Wales

**YOU CAN BE SURE** we're aware of the documentation shortfall you refer to. We try and enclose as big a reference guide as possible within the space available, but we can't always deliver enough. But this is often because the software's authors don't go into much detail either!

## Discussions 2

The programs I would like most to see on 16-bit disks are tutorials to go with features, utilities and productivity software. We can easily get games demos from the glossy monthlies like Amiga Format.

Janet Charnley, Warrington

**CHEERS JANICE** - that's the kind of second positive response we're after. Here's a fiver - anyone else out there fancy some dash in return for constructive criticism then just send it to:

Let's make it the best disk this site is! Put it NCE, 30  
Merrivale St, Bath, Avon BA1 2BW.

## Discussions 1

Referring back to Express 151 and the request for suggestions for the Cover Disk contents, I personally would like to see more productivity software, also graphic drawing/animation programs which could include some of the better quality PD/Shareware offerings as well as demos of commercial releases.

As I do not class myself as an expert with my computer (Amiga) full tutorials of the programs included would be of great help and would allow users to get the most out of the disk.

I am sure there are many people out there who, like me, love dabbling with the software as we try to learn but are not yet experienced enough to decipher the somewhat brief and technical doc. files that are included.

With a little tutorial achieving results, however simple, can be a very satisfying and rewarding experience for us beginners.

G Collins, Bury St Edmunds

## ON THE COUCH

This week's playful pro-active psycho modeller is KEVIN WRIGHT of ROMFORD, ESSEX. Romford, home of John Bull's biter and ex-Kevin Wright. Kevin just dropped a line to our resident shrink, Dr Clare Anthony, including the name of the machine he owned, his favourite software and the machine he most desired. He then sent the lot to: Laether Couch Clare, ACE, 30 Monmouth Street, Bath BA1 2BW.

Dr. Clare took off her silk gloves, opened the letter and...

OK Kevin - here we go my young sevens, just rest your head on this pillow and let's get to it...

- MACHINE OWNED: Sega Megadrive
- FAVE SOFTWARE: Sonic The Hedgehog
- DESIRED MACHINE: Sega CD-ROM

My, my, my...you're one of the new generation of console cowboys aren't you? You say in your letter 'Help me Clare! Can you cure me?' - well it's a tall order Kevin. You see, advanced console obsessives are the most difficult subjects to deal with precisely because it's so hard to pull them away from the infernal things.

One day, your son will come along to you and say, 'Daddy, I know when you were young you used to play with your Megadrive all the time, so why can't I have my Sega Direct Neural Implant this



Christmas. All my friends have their Nintendo Central Response Devices and I'm sick of being left out! Of course, he'll be crying while he's saying this and you won't have the heart to give him what he deserves - ie, a damn good kicking - so you'll fork out the £299 and never see him again for the rest of his life. Let's face it - is this how you want your kids to grow up?

We Freudians consider CD-ROM to be an important and essential logical device in the continuing development of the human psyche. So much so that our AI people are, at this very moment, developing Sigmund Interactive. It's simple to use and takes all major credit cards. It also makes Eliza look like Carl Jung.

PROGNOSIS: Go to your local pub and drink 15 pints of John Bull's biter. Then stare mindlessly at the CD jukebox for six hours. On your way to hospital you will realise that this is a lot cheaper than buying a CD-ROM and provides great entertainment for other drinkers too.



## PC v Amiga

I couldn't let your article about PCs pass without comment.

My own experience of using PCs over many years has been that the machines are reliable and easy to use. I have had three Victors (CAD systems) running five days a week for six years without a hardware hitch.

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The backup from the builders has always been helpful with of course on site maintenance for the first year. They are beginning to look a bit old now and one of the mothers is on the blink.

However, for home use I bought a CBM 1500 with all the extras (hard disk, etc) in March. My oh my, what a contrast. A great machine, but service backup is hopeless!

In July the CBM monitor blanked. I took it back to the shop where I bought it to be sent back to CBM. I asked about an immediate replacement only to be told that there was no policy for lending out monitors to disgruntled customers.

I explained that I was in the middle of developing a program for work using AmigaVision and the shop manager lent me his monitor. Thanks to him I completed the work, but as yet there is no sign of my monitor.

My point is that a customer buys the lot from CBM and the monitor breaks down, the whole thing is useless and perhaps I have a right to demand all of my money back. What's your view? Of course, I enjoy working with the Amiga, but CBM is going to have to get its act together if it wants to keep its current market position.

I get the distinct impression that CBM is only interested in the cash now and doesn't give a

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monkey whether you go back again as there are plenty of new parties doing to part with their cash. Here I got news for CBM? Anybody got a bright new speedy PC for sale?

Graham Warr, Stockport

**I'M AFRAID THE KIND** of back-up service you're used to is only really found in the corporate sector where there are so many vendors doing out DOS-in-a-box that after sales are part of a package's market competitiveness.

Having said that, it does seem somewhat ridiculous to have had to have waited since July for a monitor to be fixed. I'd go up the wall.

I reckon you'd have a good chance of some kind of refund - you're covered under the statutory one year's warranty - why not try for one direct from CBM?



### Consolation

I own an Amstrad 4128 and GX4000. Firstly the GX4000 is a very good little console; it beats the NES and Master system into deep space and I am very pleased with the games I have got for it (Burning Rubber, PANG, Navy Seals, X-Men and Switchblade).

Express and Amstrad Action (even though the people on Express do nothing but talk about Amigas and Macs) will probably agree with me, but why then does

everybody who has not seen my GX4000 think it's "3.5", but all the people who have seen it have said it's very good?

Lastly, why do people slag off each others computers? Examples include C64 v Speccy v CPC-Plus and ST v Amiga v PC.

These arguments are pointless and all of you on Express

probably agree with me. But you on Express make things worse, why don't you call yourselves New Mac Express or Amiga Express because that's what you're slowly turning your magazine into.

If I brought one of these machines what would I do with it? The answer, no more than I would do on my Amstrad. Otherwise

congratulations on a brilliant mag. More 8-bit stuff please.

Markus Durham, Farnham, Surrey

**IF YOU USE** your CPC mainly for playing games then a Mac is of no use to you. However, the benefit of buying an Amiga should be apparent - the games are better and there's more of 'em. ■

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"EXCELLENT" note from ST User October '91

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**AMIGA A1500 SOFTWARE** consists of A1500 base pack and the following software: Platinum Works, Deluxe Paint Version 3, Populous, Samn City, Battle Chess, The Finest Hour (Battle of Britain) and 2 books **£655.00**

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## MACHINE SPECIFICS

## MACINTOSH

- Mass-media marketing with Mac in the USSR
- Fast fonts: the latest on-line delicacy
- CD-ROM prices coming down to earth at last

## APPLESKI

Following on from the news of the appointment of a Macintosh dealer in the Soviet Union for what's left of it, Apple has started a mass-media marketing campaign. Soviet publications according to an on-line service NewsByTas.

The campaign is being co-ordinated by Intermedia, the aforementioned dealer, and has the somewhat confusing theme "A solid US family has serious intentions to live and work in the USSR". Publications like *Izvestia* are carrying the ads, and the campaign will also include TV and radio commercials.

## ON-LINE FONTS

The Universal Font Company has launched a fonts by modem service, in an effort to make fonts more easily available.

The service operates through a number of resellers (normally high street "mainframe printers" DTP bureau, computer dealers and the like), who have a phone number and password to the UPC's on-line type library.

All the user has to do is walk into the shop and specify the fonts that they want. A few minutes later they walk out the door with a disk.

So far the service has access to the Bitstream Montytype and Adobe font

families, but negotiations are underway for four other major libraries to be included.

The service has had over 30 dealership applications so far, with more arriving all the time. For details of your nearest Universal Font Company dealer, give the company a call on 0242 229308.

## 'CHEAP' MONITORS

Well, it all depends on what your understanding of low cost is. Hayden and Son has announced that the E-Machines ColorPage E16 monitor, a 16-inch affair that works with all colour-capable Macs (that is all except the modular machines such as the Classic,

SE and so on) requires no extra interface for the Mac (as of this writing) 256 colours at a resolution of 640 x 400 pixels.

The E16 will also work on the Mac LC, with the addition of an interface card, the specially named 1106 LC16. The interface card, which retails for £375 + VAT, will fit not only E-Machines' own 16-inch monitor, but also those from Sony SuperMac and Apple. The ColorPage E16 sells for £1,195 + VAT, so the whole package for an LC is just £1,570 + VAT.

OK, so it's not exactly budget, but it's actually pretty good value for money providing 70 per cent more viewing area than a standard 13-inch monitor.

## POSTCARD FROM AMERICA

If you sneak a peek at the World Expo calendar (sorry, no animals), it's always Macworld somewhere. There are up to 15 Expos a year worldwide. The premier spreads, with the monster crowds, are in San Francisco, Tokyo, and Boston.

Even this year's Boston Expo wasn't grand enough in this recessionary year, and many companies decided to stay home. The cost of a booth at these shows keeps rising. The smallest can cost more than \$25,000, when you add shipping, setup, personnel expenses - Ouch! So, there were holes where booths ought to have been.

There was hope that this Expo would overflow with trailblazing System 7-ready software to make our mouths water and our pocketbooks open up. Unfortunately, most vendors are still shaking the bugs from their upcoming products. Users that have taken the Seventh slip are buying RAM and updates for

applications they already own.

What people wanted to see, and couldn't, were the new flavours of Macintosh due out in late October and QuickTime multimedia system software extensions. QuickTime provides a standard way for software to compress sound and pictures, and handle time-based events, so everything happens when it is supposed to, letting us cut, paste, and use digitised movies in our documents. Desktop video cards, special videocassettes, and jumbo hard drives were pawed over by multimedia true believers. Is a word processor a word processor, it is in include little motion pictures, with digital sound, as illustrations?

Best demo incorporating food was in the Hewlett-Packard booth. The new colour *Intell DeskWriter C* was printing on corn tortillas. You can have your cake, and feed it too!

David Morgenstern

## FEED YOUR ST!



## MEMORY UPGRADES

VISA

## HCS STE MEMORY UPGRADE KITS

STE kits come in either SIMM or SIP type modules. SIMM modules have edge connectors. SIP have pins. All types plug into 4 sockets under the top of the case. SIMM is the most common and are supplied by default. These will be upgraded if necessary. The cost is paid on a refund after you have upgraded your computer. All kits come C/W illustrated instructions. 2x4 MB come C/W FREE multitasking software.

| STE KITS      | NORMAL PRICE       | WITH 512K TRADE IN | WITH 1024K TRADE IN |
|---------------|--------------------|--------------------|---------------------|
| 512K OR 1024K | <del>£22.00</del>  |                    |                     |
| 2 MEGABYTE    | <del>£80.00</del>  | £70.00             | <del>£100.00</del>  |
| 4 MEGABYTE    | <del>£150.00</del> | £140.00            | <del>£130.00</del>  |

## STF(M) MEMORY UPGRADE KITS

There are two basic types of upgrade. The low end solder-in type which comes complete with sockets, capacitors, resistors and instructions, or the much easier to install Xtronic On-line Kit which fits inside the computer. It allows upgrading to 4MB using memory like the STE uses.

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| Solder-in upgrade kit to 1MB.....         | £30.00  |
| 2xram - Quality SIMM UPGRADING SYSTEM     |         |
| Upgraded to 2MB.....                      | £45.00  |
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| Upgraded to 8MB.....                      | £159.00 |
| Future you choose resolution of post..... | £20.00  |

## CHIPS

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|---------------------------|--------|
| 1x 1.0um 1.0um chips..... | £24.00 |
| 1x 1.0um 1.0um chips..... | £70.00 |

## HCS Computer Peripheral Supplies

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## PC EMULATORS

PC Emulators sit on top of the microprocessor of the ST. When in use, they take over control of the processor. This allows Speed and a high degree of compatibility. PC Speed runs 4 times faster than a PC. The AT Speed 6.3 times. The AT Speed co-processor switch allows the extra chip to accelerate numerical calculations 5000% (five thousand).

|                      |          |         |        |         |
|----------------------|----------|---------|--------|---------|
| AT SPEED             | SUPPLIED | £320.00 | FITTED | £245.00 |
| PC SPEED             | SUPPLIED | £90.00  | FITTED | £130.00 |
| AT SPEED STX ADAPTOR | SUPPLIED |         |        | £95.00  |

## MACINTOSH EMULATORS

SpeciRe GCR allows the ST to emulate the MAC using the ST's own processor (as used in the Macintosh). It simply plugs into the cartridge slot and the disk drive port. It also has a through port to allow a second drive. It will run up to system 8. The version supplied will be the most up to date, supplied by GADGETS.

|             |          |         |
|-------------|----------|---------|
| SPECIRe GCR | SUPPLIED | £250.00 |
| 128K ROM    | SUPPLIED | £70.00  |

## DISK DRIVES

The double sided disk drive III replaces the internal single sided drive in the STFM. The PROTAX hard drives supplied are of the highest quality and are ST Format GOLD winners of 1991.

|                                      |         |
|--------------------------------------|---------|
| DOUBLE SIDED DISK DRIVE UPGRADE..... | £47.00  |
| 40MB PROTAX HARD DRIVE.....          | £335.00 |
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## HOW TO ORDER

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according to E-Machines. More details from Hayden and Son on 081-203 5171

## UPGRADED ART

Canvas 3.0, an upgrade to Denisha Software's professional drawing package, has just started shipping. It has been completely re-designed to incorporate System 7 support, and has been 18 months in the making.

The upgrade features over 100 new features, including Pantone colours, WYSIWYG colour calibration for CMYK and Pantone, System 7-savvy features and TrueType and PostScript Type 1 font conversion to Bézier outlines.

Anyone who purchased Canvas 2.1 from 1 April this year onwards can upgrade free to the new version 3.0. Other users of previous versions of the program can upgrade for £89 + VAT, and the program itself sells for £295 + VAT.

For upgrades, call the Principal Distribution's upgrade hotline on 0706 831631.

For information on the program's availability and details of your nearest dealer, telephone 081-477 7631.

## CHEAP(ISH) CD-ROM

The CD-ROM is a superb way of shipping large volumes of information. Encyclopaedias, dictionaries, the Guinness Book of Records, fonts, detailed accounts of renal tumours in children — all are available in CD-ROM format (and often not by any other computerised means).

Indeed, Apple now sends its

developers like their material on CD-ROMs, meaning that they must have a drive.

The problem for Mac users is that, until recently, Macintosh CD-ROM players have all been extensions, priced compared with the PC equivalents. However, it looks as though that disparity may slowly be reducing, with an offer from Magnum Software: a drive plus Macintosh font CD-ROM (which includes 6480-worth of free fonts) for £499 + VAT. Or, alternatively, you can take the drive for the same price and get £100 off the company's Instant Art CD-ROM. More details from Magnum on 0884 820240.

The company also produces a large collection of PostScript illustrations — chiefly maps. These are of extremely high quality, and are certainly worth investigating if you need that sort of thing. Prices are, for example, £95 for Europe, £95 for the world and £265 for the UK, the rest of Europe and the entire world. The maps can be directly imported into page makeup software such as XPress or PageMaker and can be edited in programs such as Adobe Illustrator and Aldus Freehand. The company also supplies 200-plus symbols, based on the British Tourist Board recommended symbols as a Type 1 PostScript font. EPS or as PICT files. The symbols cost £59 for the collection in whichever format you require.

For more details and a price-list contact Magnum again on 0884 820240.

Ian Wrigley

## CPC

- Life in the fast lane with speedway software
- Getting to grips with the man in the long brown overcoat in Darkman
- Happy days are here again with Fun School 4

## NOISE AND DUST

Any speedway fans out there? If so, you ought to know about the software of Teamington SpA. ET is speedway mad, and is publishing no fewer than three speedway programs for the Amstrad. These are:

- Team Championship: This has you chasing the league title, working your way up through the heats, battling through futures and generally slogging your way to the top.
- World League: More the same except that eight top countries and riders are taking part. You can elect to manage any of the countries.
- Speedway Datafile: This one's a bit different, not being a game at all. Instead, it's a way of keeping track of your favourite sport and personalities via a specially designed database which can handle match reports, results, rider updates and more.

All three games cost £7 on cassette and £7.50 on disk. Or you can get the whole lot on disk for an all-in price of

£18.

Without having seen the programs I can't comment on them. They're none too cheap, but they are the only games for speedway strategy nuts I've ever heard of. Ma? Give me GP racing any day. (The only time I ever went to a speedway meet I spent most of my day eating crunchy hot dogs and galling beer clinker out of my eye.)

## DON'T TOUCH METHS

I've been told by Steve Ray at London for my advice about cleaning tape heads.

You advised readers to clean their computer tape-heads with a dab of methylated spirits on a clean cloth. DON'T!

Oh.

Go to your local chemist and ask for a small bottle of Isopropyl Alcohol, about 50p, and some cotton buds.

Oh.

Continued on page 29 ►

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"Meths leave behind a dirty residue and unless you're using a lint-free cloth, stick to using cotton buds. They're easier to manipulate in those awkward corners."

Oh.  
"I hate the sound pedantic but, believe me, I do."

Don't you just hate it when other people are right? Thanks for putting us in the know, Steve. Just don't expect a Christmas card, that's all.

## THE DEVIL

David Long has written in chasing a free plug for his Public Demon library. Demon PD Well. David, you've got it. Now where's my liver oops, sorry, supposed to mention that.

The thing is, David's actually got quite a selection of software - 67 at the time, 110 by exact. Each selection takes up one side of a disk, and the good news for lightweights everywhere is that one selection costs just 50p.

The software on offer covers the whole spectrum of stuff, from demons, utilities to serious programs. Games. What's more, if you want to see a full catalogue, that too comes on a disk. This one, though, won't cost you a penny (You will have to supply a blank disk, though, and a stamped SAE).

You can get in touch with Demon PD at 47 Hilton Avenue, Hall Green, Birmingham B28 0PE.

By the way, David is also logging printer rebates for the Star LC10/11, 80 and Amstrad DMP 2000 at 54 and 111 respectively.

## DARKMAN

Life is no bow to enemies for Darkman. They have taken his manhood, don't like the sound of that. They have even taken his beloved Julie. They bring Durant and Strack. If you've seen the film, it's not all make sense if you haven't, well, just keep going anyway. Darkman has lost his face in an explosion (yuk) but, using a computer, he can disguise himself as anyone he chooses. And so, Darkman is out for revenge.

Anyway, the bottom line is that this is an Octest conversion of a film that no one saw in it you take on the role of Darkman as he pursues his tormentors through six levels of scrolling platform action. Now Octest usually manages some

pretty damned fine games based on this simple formula (Batman, Total Recall etc) but this time the company has produced a real dead duck. It's basically like Dick Tracy without a gun. Oh, and you've got a brown overcoat instead of a banana-coloured one.

Admittedly, Darkman looks good, and there's more variety than Dick Tracy, but it's still a bit of a bore.

## MORE FUN AT SCHOOL?

Blimey, it doesn't seem long ago that Fun School 3 turned up, and now Fun School 4 is on the way.

This new series follows the same. Continued on page 30 >



Darkman level three: the best of the lot. Jump the platforms and dodge the grenades.



Darkman has good graphics, but lacks any real



Level five's a change of perspective, hanging from a helicopter to stay alive.

# TECHNOMANIA

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(all printers include cable)

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Citizen Swift 24 ..... £264.99  
Optional Colour Ink for Swift printers ..... £34.99

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## MACHINE SPECIFICS

principles as the predecessors - three packages, each aimed at a different age range and each containing six sub-games. Even the presenters of the three packs are the same - almost.

Yes, it's true. While Freddy the frog still with his and Teddy the bear. Robbo the robot has got the chop it's all because of the results of a survey amongst eight and nine-year olds that revealed he just didn't have the street cred to cut it any more. Taking his place will be a new character, Sammy the Sply in FISA, the under-fives will get the leggy little about art, maths, words karate (oh yes) and more from a Teddy decked out in Renegades and baseball cap. Cool dude. Five or seven year olds get their old pal Freddy the frog back. This time teaching

them the delights of maths, punctuation, word sorting and typing. Super-cool Freddie has a skeletonbone by the way. Lastly, Sammy the Sply will be introducing the over-eights to geography history and general knowledge. We don't yet know what ultra-cool fashion accessory Sammy's going to be sporting yet.

Fun School 4 will be out on the 16th towards the end of October (book!) and on the CPC in early November (rumour).

Rod Lawton

Rod Lawton, editor of *Amstrad Action*, Britain's biggest and best-selling CPC magazine.

## CAPTAIN BLOOD CHEAT

This weird game from Infogrames may still be giving you a hard time, so here's a cratty little polar from Belfast's John Girvin. It gives you infinite time...

- 1) CAPTAIN BLOOD hack  
2) Special Action version)  
3) By John Girvin  
4) January 1991  
5)  
10) OPENOUT OF MEMORY & SFF  
20) CLOSEOUT MODE 1  
30) LOAD "Blood", A6000  
40) add=8380,RESTORE  
50) READ BYTES  
60) if bytes="BLOOD" THEN CALL  
ABE80  
70) POKE addr,VAL("b" & bytes)

- 80) add=addr+1,GOTO 10  
90) \*\*\* LEAVE ALL LINES IN \*\*\*  
100) DATA 13,21,05,60,11,34,98,01  
110) DATA 02,06,08,36,23,21,40  
120) DATA 36,32,16,22,17,34,03  
130) DATA 94,98,44,46,46,01,56  
140) DATA 21,40,22,47,45,21,00  
150) DATA 00,22,47,45,33,38,45,00  
160) DATA 21,47,47,11,00,30,66,90  
170) DATA 37,38,22,36,24,40,03  
180) DATA 30,40,41,22,08,49,03,00  
190) DATA 40,48,00,00,4A

## C64

- Has the cartridge price slash come too late?
- Is Terminator 2 just another wasted licence?
- The add-on from Trojan that'll light up your life

## CARTRIDGES DOWN

You may have read in Express 151 that Ocean has decided to drop the price of C64 cartridges from £19.99 to £14.99. And no doubt other companies will do the same.

But alas I feel it's a little too late. Why didn't the company listen to the consumers as the first place? Public opinion already underlines that outsize cassette-style games are expensive. It now is Joe Public supposed to afford £20 for one game?

Admittedly the new price is about right but many publishers have lost interest in the cartridge revolution and it looks as though you, the consumer, will lose out again.

Our only hope is that software houses will re-align their interest and release some spectacular cartridge games at the right price.

## TOLD YOU SO

After my rather sceptical preview of Terminator II a few issues back, I've been eagerly awaiting the game, just to

see if my assumptions were correct and would you believe they were.

Levels one, five and nine are out and out ball-em-up sections, featuring huge man characters (made of six sprites a piece) not to mention blood (and other tedious) gameplay. The games structure means that energy is earned over from one level to the next if you slip up on these sections, you're doomed.

Level four sees Sarah Connor traversing the corridors of the medical hospital killing anyone in her path, and likewise Arnie in the Cyberdyne lab in level seven. The best bit of action is highlighted slightly due to the ability to explore different areas.

Levels three and six are one of the major downsides of this game - maddening sliding tile puzzles. They do not waste the time at all, and can become unnecessarily frustrating to play.

Finally, levels two and eight are

Continued on page 32 >

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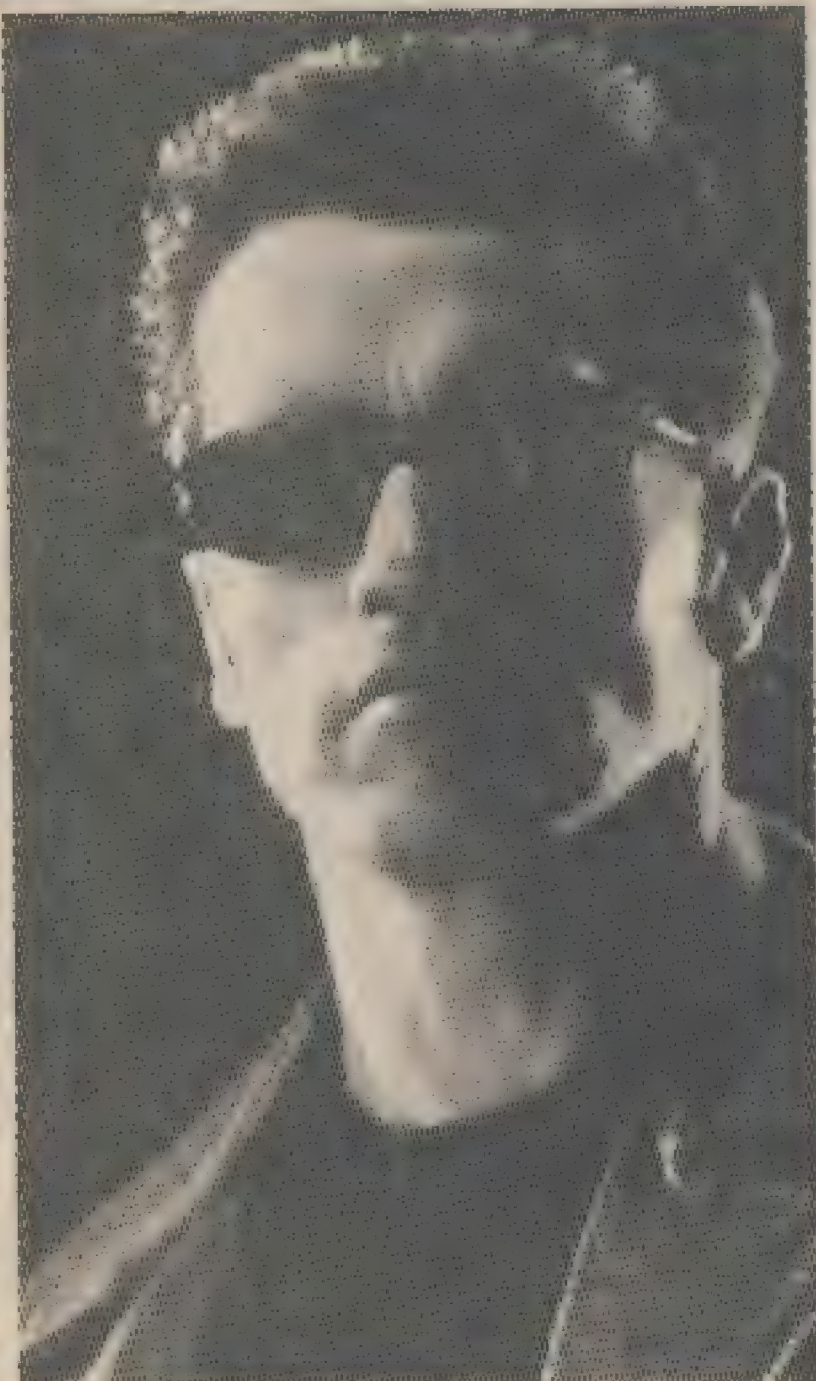
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## MACHINE SPECIFICS



• **Terminator 2** lives up to our suspicions - it's terminally awful!

vertical scrolling sections. The former is a battle to out run the Mac truck on a dirt bike, the latter sees a helicopter in pursuit of our heroes in a SWAT van. In retrospect, they were the most enjoyable parts of the game.

*Terminator 2* is disappointing to say the least, and is ultimately a wasted licence. Many of the levels have been seen umpteen times before in games such as *Batman* and *Total Recall*. In fact

there are no innovative sections whatsoever.

It's a pity, because the music and sound effects are great and the graphics on each level are colourful and often superbly animated. Add to this some atmospheric inter-level screens, and you have an aesthetically pleasing bummer (to coin a phrase).

If you've seen the film and loved it, buy *The Making of Terminator 2* book - you'll save yourself a fiver, and probably have more fun.

### LIGHT FANTASTIC

Lightpens and light-equipment have been sparse on the C64 to say the least. In fact Trojan was the only company to release

such a peripheral. Quite strange, considering that custom lightpen locations are built into the hardware of the C64.

Well, the company has seen fit to release a substantially modernised lightpen, along with an innovative art package called *Pen-Master*. Alongside this is the Phazer, a light-gun which comes complete with some specially written games.

The Magnum light-gun, bundled with the C64 last year, barely excited me, but the Phazer looks set to be impressive. Both packages are due for release soon, but prices are as yet unknown. More next week.

Andrew Roberts

### RE-RELEASE ROUND-UP

There have been quite a few re-releases over the Summer months, some good and some bad. Here's an 'at a glance' overview of some of the better ones...

• **XYBOTS (Hit Squad)** - A generally very playable coin-op conversion, boasting some neat visual effects. This game certainly comes into its own in two player mode.

• **OPERATION THUNDERBOLT (Hit Squad)** - The final conversion was the second which Ocean had produced, due to some technical mix-up. It lacks the atmosphere, and the graphics are a little bland, but it's great fun nevertheless.

• **CABAL (Hit Squad)** - One of the

better *Rambo* games around, this static screen shoot 'em down is very hectic, aesthetically gorgeous, and sports some brilliant 3D programming.

• **SHINOBI (Mastertronic)** - A competent conversion of the best martial arts games. The 3D sections are somewhat jerky, but the sheer depth of the games makes up for it.

### EASY DRILLING



• You can drill with ease thanks to our handy poke

Yep, it's another listing for the Virtual Worlds compilation, lovingly sculpted by Martin Pugh. If you haven't bought it yet, do - it's one of the best around. Anyway, you know the score; type in the program, **SAVE** it just in case, then **RUN** for infinite shields and energy.

0 REM \*DRILLER TAPE CHEAT\*

1 FOR X=533 TO 577:READ

Y:C=C+Y:POKE X,Y:NEXT

2 IF C=5085 THEN POKE

157,128:

SYS533

3 PRINT"DATA ERROR"

4 DATA 169,34,141,40,3,169,2,

141,41,3,32,86

5 DATA 245,169,11,141,206,1,

96,72,77,80,169,240

6 DATA 141,108,100,141,221,

113,141,57,100,141,229,111

7 DATA

141,97,119,141,192,111,

76,235,2\*

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- Micro Haus General Shareware Volume 1

The final disk is the Micro Haus General Shareware Volume 1, a world class product which enjoyed huge success in the CD-ROM arena. Containing 10,000 files, it features some of the best Shareware and Public Domain software ever to be published. It is probably the best method of reviewing software on a 'try before you buy' basis.

**Six Free Titles!**



# SPECTRUM

- Make Music - Metronome routine and Writer club
- New SAM Coupé adventure club
- Two Spectrum publications bite the dust

## MUSIC ANONYMOUS

Attention Spooky master! If you're scoring a sonic masterpiece with the help of the superb music creation utility, Music Writer, here's a club, that you'll want to be seen at.

Die hard composer folk can find solace and fellow addicted users with the formation of Music Writers Anonymous. This is a new club set up by author Gary Rowlands for everyone using Music Writer. MWA provides, free of charge, a swap shop for your MSC and completed music files.

There's no membership fee and sets of around eight songs are being made available for a very reasonable £1 on tape and £3 on disk.

Sounds like a good idea to me. Contact G. Rowlands PO BOX 49 Dagenham RM9 5NV for more details.

## TICK TOCK

On a similarly musical note (and perhaps pun) here's just the thing for Spectrum owning musicians. The very clever Calum Benise of Hamilton supplied me

with the following excellent little program.

It's a three line metronome that's easily amplified through a hi-fi and provides as many Beats Per Minute as you want!

Simply enter the number of beats required when prompted.

Calum says "astute readers will soon notice how to have astounding border colours if they feel so inclined and any other improvements will probably require modification to the delay loop time" but as it stands, 11250 is as accurate as makes no difference."

Thanks for sending it Calum. Have you got a shortlist? Spooky routine that the rest of us would find useful? Send it to Robin Alway Spectrum Column, New Computer Express 30 Manmouth Street, Bath BA1 2BW. To

## NEW PD SOURCE

News of the decidedly good variety! A new Spectrum Public Domain library has come into being.

Chief librarian of Propag PD, Alex Kinch has already got some pretty well stacked shelves with around 70 titles at last count covering areas as diverse as games, communications, programming and cookbooks making. By the time you read this he should have lots more through, including the now deceased Spooky Sector's collection.

Like all good PD librarians of course he wants more and won't rest until he gets it. Have you got any programs you would like to be available cheaply to fellow Spec chums, without copyright restrictions and basically, be of interest to lots of people? Write to Alex Kinch at 153 Rushurst Road, Bromley, Kent BR4 0AG or phone him on 031 777 5241 (After 7pm weekdays and anytime weekends).

Propag's first catalogue should be out soon and I wish them good luck and look forward to sampling some good PD soon.

## SAM UNITED

As far as I know there's only a few adventure style games available for the SAM so it's perhaps a bit surprising to hear about a SAM Coupé adventures club.

If anything it shows the enthusiasm of founder members Phil Glover and Dave Whitmore. The aim of the club,

Phil tells me "will be to stimulate and encourage adventuring on this fine machine".

Due to this, ahem, slight shortage of Coupé specific adventures, any suitable Spooky games that run on the SAM will be mentioned as the club's disk magazine that the adventurous pair have already started writing.

Before officially launching the club however, Phil wants to see if any other people are interested in this venture. As he says "Even if there are only half a dozen of us, it will be worthwhile. At least we could moan about the lack of software at the moment".

SAM adventurers interested in this idea would do well to contact Phil Glover at 43 Ferndale Road, Hat Green, Birmingham, West Midlands B28 9AU.

## GOODBYE ENIGMA

The rumours of a few months ago are now unfortunately fact. Enigma Tape Magazine is deceased.

Here's Jan Ross, on behalf of the ETM team to let you, my "am" writing to you to let you know of the untimely death of Enigma Tape Magazine. It passed away peacefully a few weeks ago and no flowers should be sent. Donations to the above address.

"Sensuously, Graeme has gone off to college, Hemish is working on a new project I'm going to try my hand at some more general writing work and the rest

Continued on page 34 >

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## MACHINE SPECIFICS

All the ETM team have gone off to do their own thing. Can I take this opportunity to thank, on behalf of all the team, all those people who bought the mag and said such decent things about us and also all those people on the proper mags (yourself included) who gave us such great reviews. Goodbye and thanks for all the fish! (P)

Sniff. ETM was undoubtedly one of the best SPY publications. It will be sorely missed.

### ...AND CRASH

Farwell then Crash Newsfield's

bankruptcy means the end of the long running *Speedy* mag that at one time was the best selling computer title in Britain.

*Crash* was an important organ in its heyday, scrupulously fair when reviewing games, catering for the broad base of the *Speedy* owning community and encouraging reader interaction whenever possible. Although those days were long gone, *Crash* still sold in reasonable numbers and it would still nice to see the title relaunched by another publishing house if that doesn't happen though, may it rest in peace.

Robin Ahray

### POKE IN THE EYE

On your computer screen, you can get hold of a whole lot more of the things from the same column sneaky Alan Johns (AKA Ayscough Drive, Enkline, Remembrance PAB 60E).

However, this is a poke in the eye, not a poke in the back. It's a poke in the back of the head, not a poke in the back of the head. It's a poke in the back of the head, not a poke in the back of the head.

Have a good time, poking in the back of the head.

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Unleash your inner geek.

Unleash your inner geek.

Unleash your inner geek.

Unleash your inner geek.

### UNTOUCHABLES



If you've run out of time, then our untouchables poke in the ass.

## CONSOLES

- Yanks come up trumps with TurboGrafx adaptor
- Experience life as a big, blue blob in *JerryBoy*
- A dazzling toranopia of games from Konami

### TURBO CHARGED

There have been a number of adaptors for consoles in the past so you can run certain games on different machines, but unfortunately, there hasn't been an adaptor made which can run American TurboGrafx-16 games on the PC Engine.

However, the lucky Yanks can have it the other way round, as you can now pick up an adaptor to run Japanese cards on your American machine for about £55.

So, if you're thinking of buying a PC Engine, consider a TurboGrafx-16!

### SILLY PUTTY

The strangest game this week comes from Epic/Sony called *JerryBoy* for the Super Famicom. You have been turned into a bright blue blob by a nasty magooon and must travel across the land to find the evil SSB so you can return to your former self.

The blob can slide around, jump, squash himself or elongate, stick on to walls and ceilings and when located, the balls and bombs. Up against you are



*JerryBoy* - to avoid lava you have to launch yourself and stick to the right wall

some very dangerous hazards including negotiating be-spiked sewers, traps, icy slopes, plus mice, birds, bugs, penguins and various other creatures - however, like *Mario*, you can jump on to them, and squash them, although certain nasties really must be avoided such as the moving flames.

Rash the end and you must face the enemy boss. The first is a large

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crackin', which charges for you. Jerry Boy is certainly a very different game, fairly payable, and quite difficult to shut.

## BOMB OF A GAME

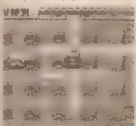
The super duper PC Engine game from Hudson Soft: Bomber Man has been snapped up by them, and will be hitting the arcades real soon.

Unfortunately, the multi-player game is only two players, but there are two other computer opponents to battle against, so it's not that bad. It has been played up the graphics, but all the beauty is the engine game remains. I can wait!

## MORE FROM KONAMI

Latter from the games expert company Konami for the 8-bit Nintendo will be a conversion of Akari Games strategy arcade game, Rampart.

If you haven't played the coin-op, it's



● Sharpen up your skills of precision with the Bomber Man

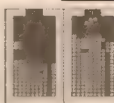


● Bomb until you heart's content in Tetris 2: Bombliss

goes like this. You have a castle with a wall around it, and can place a number of cannons inside. If you are playing with another player, they have the same too. You then have a cursor and have a few seconds to target your cannons at the opponent's surrounding wall to cause as much damage as possible. Then, you have a few seconds to fix in the gaps in your damaged walls. If the computer is shelling out Tetris like shapes, if you don't completely surround your castle, then it's game over.

Rampart should be available in Japan early November. Also from Konami will be Kantanic Golf for the Game Boy again available in early November and the looks like a Golf game really worth getting. Although it's basically just a top-down view over the course, control of hitting the ball is based on their coin-ops, where you can set your stance, change which club you want to use etc.

The Russians are Back the biggest



● Tetris 2: Two player action was on the Game Boy

game to hit Japan on the 8-bit Nintendo in October is bound to be the release of Tetris 2: Bombliss. The game again is by those crazy Russians, who incidentally don't live in the USSR but in the USA working for Asor, so weren't affected by all the going on that've been happening in their home country.

Tetris 2 is basically the same as the original, but more like Game Type 6 on the Game Boy version as you have a lot of random blocks at the bottom of the



## MACHINE SPECIFICS

column, and you must clear them. However, as time goes on, more random blocks appear pushing you higher, so you have to work even harder.

Bombliss, as you might guess from the title, is Tetris with bombs. It's like the above, but some blocks contain pink squares (bombs) and when a line is created with them, they explode, taking out blocks around them.

If bombs are close to exploding bombs, they will also go off causing a chain reaction, so some strategy is required in position any shapes with bombs carefully.

The game includes a two player option, a contruction kit, and more, and will be released by Bullet Proof Software.

## GAME MUSIC

Here in the UK, we all know the likes of Rob Hubbard and Martin Galway as the best computer musicians in the business, but right over there Japan, there's only one real mega musician - and that is Yuzo Koshiro.

Anyone who has heard his fantastic music on Megadrive games, Super Shinobi and Bare Knuckle, or Actraiser on the SuperFamcom will know this guy has talent.

Well, by the time you read this, Yuzo will have two music CDs out. One is called BakaKnuckle, and the other is 'Symphonic Suite from Actraiser', both featuring music from the game. Both are on the Alfa label, so check out your local music importer.

On Lee

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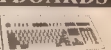
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## TECH TIPS



## TECH TIPS



## Mystery Modem

I have read the Tech Tips section for some time now, and I have a question for you. I recently obtained a Prism 1000 modem from a car boot sale for the sum of £3. On the back is a 5-pin DIN plug. I was wondering if you had any information on the connections that would need to be made to wire it to an Atari Mega ST2. Any other information you could supply about this item would be appreciated (especially Prism's address).

I hope you can help me with this matter, as I feel that other ST users could benefit also.

Corran P Goodwin, Rotham

THE PRISM 1000 dates back to the early 80s, and I think it was a Sinclair specific device, though I am not certain on this point. Unfortunately the makers of Prism modems, OEL, ceased to be a viable concern back in 1985. Unless the modem has a standard 25-pin D connector, then I would not advise trying to connect it to the Mega ST2 as it is likely to be unballasted output.

Frankly, the 5-pin DIN socket sounds more like the power supply socket than anything else. However, I am sure that somebody out there will have a manual for the Prism 1000 modem that they no longer require. It so could they send it in to Express and we will pass it on to Mr Goodwin.

You would be better off getting a new modem such as a Pace Linnet. I have seen several adverts in the computer press for these starting at around £40. Details on VTX 5000 modems can be had from B G Services which seems to have cornered the market for this particular product. B G Services is on 081 3970763.



## Comms question

I'm fascinated by that page you print from time to time with all the "bulletin boards" on it. I fancy the idea of using my Amstrad to have a go, but I have three questions:

- 1) What exactly is a bulletin board?
  - 2) What equipment do I need to use one?
  - 3) What do all those codes like "V21" mean in the list?
- I'd appreciate some answers before I spend a fortune!

John Bantley, Pontypool

COMMS IS INDEED A FASCINATING AREA, but beware. It can become addictive and you'll find yourself "on-line" at all hours of the night! Anyway, to your questions:

1) A bulletin board is a system for leaving messages and having "conversations" over the telephone system using a computer. You ring the number and using your computer you can read the messages, reply to them, and leave your own. Plus there are usually dozens (if not hundreds) of PD programs on these boards which you can copy ("download" in the parlance) to your machine. Each board has a very different style, because of the people who use it and the preferences of the person who runs it, called a "sysop". Some only cater for one machine or specialist interest, but many welcome all.

2) You need a modem (the device which converts computer signals to sound so they can be sent by phone), some cables to connect it to your PC, and software on your PC to drive it. You need to make two decisions before buying a modem: should it be internal or external, and how fast it should be.

Internal modems sit on an expansion card and slot away neatly inside the PC. External ones come in their own box, requiring cabling, and need their own power supply. External modems are more expensive because the box and power supply need to be added, so unless you intend to use the modem with several machines, go for an internal one.

The question "how fast should it be?" is probably better phrased "how fast can you afford". Modern speeds are measured in baud, and they come in 300, 1,200, 2,400 and 9,600 baud varieties. Don't buy a 300 baud unit; they are breathtakingly slow and will cripple you with boredom and excessive phone bills. 1,200 baud is a useful minimum, but 2,400 is better and is the common "home" speed. 9,600 baud modems are still too expensive for most, but prices are dropping.

The software issues is easier. Many modems are supplied with a comms program, but if they aren't there are

many excellent shareware programs such as Tebr and ProComm which cost very little and are available from PD libraries. For home use, a commercial comms program is overkill.

And finally 3) The numbers are codes which tell comms enthusiasts what modem speeds to use when dialing the bulletin boards. They were developed to try to make comms simpler and to cut away the jargon, but unfortunately they have only succeeded in adding an extra layer of confusion to the newly initiated. There are dozens of codes but the commonest are:

- V21 - 300 baud
- V22 - 1,200 baud
- V22bis - 2,400 baud

If you buy a 2,400 baud modem then you can use any board which has one or more of these codes.



## Guidelines

I've designed our Guides newsletter using Amiga as I do every month, before sending the disk to a friend so she can print them on her laser printer. But this month I hit a problem: because of a large number of pictures in the document it's 400K big, and won't fit on a floppy. What can I do?

Catherine Consett, Norwich

WELL YOU COULD UPGRADE your disk drive to a 3.5-inch 720K drive, but I guess that isn't a very helpful answer.

You have two choices. You can use the DOS BACKUP command to copy the file on to two disks, then RESTORE it at the other end, or more elegantly you can shrink the file using one of several file compression programs. My favourite is PKZIP, which is shareware and available from any library. It should have no problem getting a DTP document to shrink enough to fit on a disk. By the way, have you tried "Saving As..." the document to a new name? With several DTP programs this can shrink the file quite dramatically as the new copy is written to disk more efficiently. I don't

know if this works for Amiga, but it's worth a try.



## DIP switch

I've recently bought a second-hand printer without manuals, and I can't figure out the DIP switch settings.

The printer is a Brother M-1100 dot matrix, and I know I am using the correct printer driver, because I had one of these printers before. I also know that the printer works, because I've seen it work on another (non-Amiga) system.

What I'd like is for someone with one of these printers and an Amiga to write in and let me know what the switch settings should be.

PA Bakamy, Sheffield



## Fat or thin?

I keep hearing all of this talk of Fat and Thin Agnuses, Chip and Fast RAM, and God only knows what else. Can you please explain to me what it all means, and how I can find out exactly what I have inside my Amiga 500?

St Small, Bromley, Kent

THERE SEEMS TO BE A LOT of confusion on this subject. I'll begin by explaining the difference between Fast and Chip RAM.

As you are no doubt aware, the Amiga has, as well as its 68000 microprocessor, a number of custom chips which deal with graphics, sound and so on. The chip most directly concerned with graphics is the Agnus chip. It is an intelligent beast, and performs by accessing its memory directly, without the aid of the microprocessor. But whereas the microprocessor can access all of the Amiga's memory, Agnus is much more limited in the memory it can 'see'.

For most Amigas, the Agnus can address just a megabyte. This memory is known as Chip RAM, since it is available to the custom chips. Obviously, the more Chip RAM you have, the better, since it means you can have more and bigger pictures, longer sound samples



## Saving typing

A quick one from Alan Gerrard in the wilds of Dorset. If you find you are forever typing:

dir /s /a

In packed directories, create a batch file with just that command in it and name it LIST.BAT or whatever and put it in the DOS directory. Then just typing LIST will save your fingers wear and tear. Of course this can be extended to any command you use frequently.

Paul Johnson, Stevenage, Herts

## Battlechess ST vs Amiga

I have an Atari 1040STFM and my neighbour has an Commodore Amiga 500. We don't fight or argue about the merits of our respective machines as we are both more than satisfied with what we have got!

We both have copies of Battlechess for our machines, and we have noticed that there is an option where a player can be controlled by either computer, human or modem.

Does this mean that we can connect our computers together via modems so that we can play against each other? Or even get the two machines against each other? Then we will see if My Computer Really is Better Than His Computer, won't we?

Can we link up for other games besides Battlechess?

Chris Holstner, Bristol

**AH, YES,** an interesting contest in the offing here. You certainly can set up the machines to play each other in Battlechess and you don't need to use modems as long as you don't mind being in the same room, or make up a long lead. You simply need two 25 way D sockets and a length of screened multi-core cable, to make up an RS232 lead called a "Null Modem".

Connections are as follows. Atari end to Amiga Computer, won't we?

end. See the diagram (above right).

Atari ST  
Modem Port

|    |   |   |    |
|----|---|---|----|
| 14 | 0 | 0 | 1  |
| 15 | 0 | 0 | 2  |
| 16 | 0 | 0 | 3  |
| 17 | 0 | 0 | 4  |
| 18 | 0 | 0 | 5  |
| 19 | 0 | 0 | 6  |
| 20 | 0 | 0 | 7  |
| 21 | 0 | 0 | 8  |
| 22 | 0 | 0 | 9  |
| 23 | 0 | 0 | 10 |
| 24 | 0 | 0 | 11 |
| 25 | 0 | 0 | 12 |

Amiga  
Serial Port

|   |    |   |    |
|---|----|---|----|
| 0 | 14 | 0 | 1  |
| 0 | 15 | 0 | 2  |
| 0 | 16 | 0 | 3  |
| 0 | 17 | 0 | 4  |
| 0 | 18 | 0 | 5  |
| 0 | 19 | 0 | 6  |
| 0 | 20 | 0 | 7  |
| 0 | 21 | 0 | 8  |
| 0 | 22 | 0 | 9  |
| 0 | 23 | 0 | 10 |
| 0 | 24 | 0 | 11 |
| 0 | 25 | 0 | 12 |

25 Way D Sockets in Null  
Modem Configuration

CP 1991

• 25 way D sockets and some screened multi-core cable are all you need to make a "Null modem" to connect an Atari ST to a Commodore Amiga 500

Pin 2 to pin 3  
Pin 4 to pin 5  
Pin 8 to pin 20  
Pin 20 to pin 8

Pin 3 to pin 2  
Pin 5 to pin 4  
Pin 7 to pin 7

data and flat between the two machines using suitable comm software. Electronic bits available from your local Maplins or electronics store, cost about five pounds in total (depending on the length of cable you use). If you have not got a Maplins store in your area, the new Maplins mail order catalogue is available at W.R. Smiths. Maplins mail order no. 0702 554161

At both ends link pin 6 to pin 8 with a small loop of wire. This type of lead can also be used to transfer

and smoother, more complex animations

When Agnus accesses Chip RAM, it prompts the processor from doing so at the same time, and this causes programs to run more slowly. Therefore, processor accesses to RAM which is not Chip RAM occur more quickly. Such RAM is called Fast RAM.

Commodore has released a number of different Agnuses in the Amiga's short history. Each of them has a serial number printed on its back. The earliest was the 9361. After that came the Fat Agnus, numbered 9371 (and the 9370, which is the American equivalent). All of these can access half a megabyte of Chip RAM.

More recently, Commodore has started fitting Agnuses with the Fatter Agnus (no. 9372a) which can access 1Mb of RAM. There is yet another model, currently available only for Amiga 3000s, which can access 2Mb of RAM.

You can find out how much Chip and Fast RAM you have by entering the Shell and typing "avail". You will be told how much of each type of memory is available, and also how much there is in total.

However, you may vary well have a Fatter Agnus and yet only 0.5Mb of Chip RAM. This is because A500s are shipped without a circuit board modification being made which lets the Fatter Agnus see the other 0.5Mb (assuming that you actually have that much physical RAM). If this is the case, you can get an authorised Commodore service engineer to make the alteration.

If you only have 0.5Mb of Chip RAM but suspect that you have a Fatter Agnus, you can either open your Amiga and look at the chip's serial number (thus voiding your warranty), or get hold of a public domain utility called Veecheck which will do the rummaging around inside for you and tell you which Agnus you have.



## Second-hand trials

I have an Amiga 500 with a 0.5Mb expansion in the top drawer. Having bought a second-hand copy of X-Com Professional and Cyclone 3, and being under the impression that these would enable me to use IBM and ST format disks, I set about buying a large quantity of PC software from a computer market. I've tried many of them, but I cannot get any of these programs to copy or work. Have I wasted my money, or is there something I'm doing wrong?

Fredrick Masterson, Victoria, London

**ALTHOUGH YOU MAY BE ABLE** to read PC and ST format discs, you will not be able to run any programs written for these computers. In general, programs have to be written specifically for a target computer, since computers at work in different ways and obey different instructions.

This only way you will be able to get any use out of your PC programs on the Amiga is to buy one of the several PC emulators.



## Second Drive

I am thinking of getting a second drive to use with my ST. Is there a real advantage to having two floppy drives? Can I connect more than two floppies to the ST? Do I have to use the Atari own brand drive to avoid voiding my warranty, or is it safe to use other manufacturers' drives?

It is safe to use a drive powered from the joystick socket? My friend says that it can cause the computer to overheat. Are all

external drives double-sided, or do I have to ask specifically?

John Wilson, Derry City, NI

**1) YES THERE IS** an advantage to using two floppy disk drives, increased data transfer rates when moving files between disks and you can use drive B as a data drive when using applications such as word processors and graphics/art packages whilst keeping the program disk in drive A. Some programs such as First Word Plus require you to keep the program disk in the drive at all times.

**2) The Atari III** is limited by its hardware to two floppies.

**3) Any brand of drive** can be used as long as it is III compatible. This will be clearly stated in advertisements and in the box.

**4) Several drives** are available that are powered from the joystick port, and whilst I have not heard of any problems caused by this I would not recommend it. There is usually only a £5 to £10 price difference to models with their own power supply.

**5) All** consequential drives on the market are double-sided.

There are several companies advertising in Shopping Express which can supply you with drives at very reasonable prices.



## In a fix

I'm writing to verify what can be wrong with my Atari 520STFM. I bought it about a year ago, second hand. The problem is when I initially switch on the computer, it makes a high pitched ringing sound, the power light does not come on, neither does the disk drive light.

I've heard different stories as to what it could be, but nothing

professional. I would be grateful if you could tell me what is wrong and if it is fixable?

Malcolm Nicol, Aberdeen

**IT CERTAINLY SEEMS** that you have some problems with your machine. It could be one of several things, ranging from the sound chip to the power supply. I would advise you to contact a professional Atari repair centre, as it is not wise to investigate the inside of your machine if you are not sure what you are doing, and it is unlikely that you will be able to effect a repair yourself.

In fact some repair shops won't even touch a computer if they think it has been tampered with. Eveham Micros provides a fixed rate Atari repair service for £65, which is as reasonable a rate as you can get. Eveham can be contacted on 0386 765500.

## Clocking In



I would like to program my Amiga so that it displays the system clock every time it boots up. How do I go about it?

Patrick Baker, Redcar, Cleveland

**AS WELL AS BEING AVAILABLE** as an icon, the clock can also be run from the Shell, which is exactly what needs to be done in this case. You must modify your startup-sequence (using an editor such as ED), adding the following line before the "loadkey" command:

run cmd: call: clock  
digital=240.0 24hour seconds  
date

The run command is used so that the clock becomes a background process, otherwise Workbench would not load until the clock had been stopped. ■



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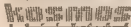
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## AUDIO UPGRADE

If you're looking for the best in Amiga sound sampling technology, then there can be only one choice - RamScan's Audio Engineer.

Released last year to critical acclaim, Audio Engineer has rapidly established itself as the number one Amiga sampler. Even now other developers are only just starting to catch up with what is generally acknowledged as the number one in Amiga sampling technology.

Not wanting to be outdone, RamScan has announced the launch of version 2 of its renowned sampling software. The Audio Engineer sampling hardware (expertly engineered by GSE) has remained unchanged, but RamScan has considerably upgraded the Audio Engineer software to distinguish it from the rest of the pack.

According to UK distributor HB Marketing, the new program will also be sold as a stand alone system without the GSoft hardware through Agfa/Onco.

Selling under the name AudioMaster 4, both products are available from HB Marketing which is on the other end of 0753 686000.

Anyway, here's what it has to offer: **4 Times Oversampling** - Now here's a first for an Amiga sampler. Audio Engineer 2 now supports 4 times oversampling - a feature which is probably more at home on a CD player than a sampler.

This new feature significantly enhances the sound quality of recordings made at lower sampling rates by substantially reducing the aliasing distortion normally associated with samples grabbed at lower sampling rates. In many cases, this will allow you to sample at much lower rates whilst retaining respectable sound quality. With this powerful capability, longer samples can be grabbed with less memory.

**TimePitch Bend** - Wow. Now this



is impressive. Audio Engineer 2 now has the ability to alter a sound's pitch and duration independently.

If, for example, you have a sample that plays for 20 seconds, Audio Engineer 2 can stretch the sound to last for 25 seconds without altering the pitch of the sound. It's also possible to make the pitch of the sound higher or lower without altering the duration of the sound.

The applications for this feature are enormous. Imagine, for example, you're using Audio Engineer to add sampled music and sound effects to a video you're working on and the sample you have lasts 5 seconds less than you actually want it to. With Audio Engineer, you can stretch that sample with ease - the only professional samplers that I know that can do this are the Akai S1100 and the infamous Synclavier (and they cost many thousands of pounds!).

**Realtime Pitch Bend** - Another first for an Amiga sampler is real-time pitch bend which allows you to alter the pitch of a sample as it's being recorded or played back in real time. Most professional samplers support this but Audio Engineer is the first Amiga

sampler to do so.

**Audio DJ** - A new bonus program that comes with Audio Engineer 2 is Audio DJ. The program allows you to load up to 160 samples into your Amiga (memory permitting) and then play any sound simply by clicking on it with the mouse pointer.

Not only can it be used as a preview tool for your samples library but it also serves as a real time effects panel for DJs and anyone else who should require such a facility.

And the rest! - Add to all these new features, Realtime Zoom (just like Audition 4), Telephone, On screen calibration, progress meter, automatic hardware filter, digital filtering and a lot more besides.

## GVP GUARANTEE X 2

Since we last chatted with themselves at the moment, not only have they recently picked up exclusive distribution rights in Great Valley Products, we're range is absolutely brilliant add-ons, but they're rapidly becoming the number one supplier of Amiga related products in the UK.

It marks the occasion, Silica (in conjunction with GVP) have announced that as from now all GVP products bought through Silica carry a two year guarantee - which is a year more than the previous guarantee period.

If you're in the market for such things as hard drives, processor accelerators and such like, you won't go far wrong with GVP. Indeed, I'd go so far as to say that GVP products are probably the best you can buy.

In particular, GVP do a particularly nice line in hard drives for both the A500 and the B2000 (A1500). Its series 2 hard drives for the 2000 are not only some of the most advanced available for the Amiga, but also the latest! Why not check them out for yourself?

To find out more about GVP

products and the rest of the Silica product line, give Silica a call on 081 309 1111.

## HARD DISK HEAVEN

Hard disk owners looking for a reliable way of backing up their drives may be interested in a new product which is being distributed in the UK by HB Marketing (0753 686000).

Called MR Backup Professional, the program not only allows you to back up your drive to floppy disk, but also to any SCSI-compatible device including tape streamers and DAT drives. What's more, it's damned cheap - just £50 to you.

## 386 ATONCE SOON

Staying at Silica, the company recently revealed to me that a 386-based version of its successful Vortex ATonce PC Emulator is in the pipeline. So to ATonce386 should follow soon after.

Vortex had originally intended to release both the Amiga and ST versions almost simultaneously, but it has encountered problems trying to get the 386 to work with the Amiga. According to Silica's press officer Andy Leaning, the simplicity of the ST's architecture makes it much easier for the 386 to work, but he hopes that the Amiga version should not be far behind. At the present time, no firm details are available, but I'll bring you more as soon as I hear it.

If you can't wait that long, then the 286 version of ATonce is still available. It's a very nice piece of kit indeed which will allow your Amiga to run PC software alongside. Amiga software thanks it the joys of Amiga multitasking.

And, as always, I'll bring you a full review as soon as those nice people at Silica send me a review sample.

For more information give Silica a bell on 081 309 1111 for more.

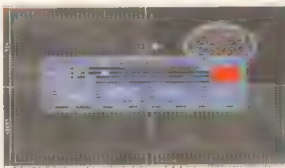
Jason Holborn

## PIXEL 3D OBJECT CONVERTER UPGRADED

Also from HB Marketing is an upgraded release of Pixel 3D, the absolutely stunning object converter for ray-tracing programs.

Just like the original, the program allows you to convert objects between a variety of different programs including Script, 3D Professional, Turbo Silver, Imagine, VideoScan and even AutoCAD (the PC CAD program). AutoCAD supports extend to saving only, but it's nice to have it nonetheless.

New features include the ability to view the object being converted in wireframe, solid, shaded or photo mode (ray-traced, I suppose), the ability to convert bitmap images to 3D objects which is handy for digitised logos, text



etc.), line straightening algorithms (reduces the amount of points in an object), colour defined extrusion, normal extrusion and beveling and much more besides.

I'll be bringing you a review of this powerful package next week, so stay tuned.

If you can't quite wait that long, then phone HB yourself on 0753 686000. Don't forget to tell them Express sent you!

See objects in a totally new light with the Pixel 3D Upgrade which will enable you to view and edit images from a number of popular ray-tracing graphics packages.



The word processor mightier than the pen and the law  
 The word of Protext is the mightiest of all  
 Are you stuck for a word? Rhyme King can help  
 Which software company is helping you? New bands?

**Y**ou're probably sick to death by now of reading how wonderful the new version (5.5) of Amora's Protext is, so I won't wobble on about it for too long. Having said that, I have to admit that all the praise it has been getting is justified.

For anyone who wants a word processor to write text in bulk, perhaps for import into another program, Protext is the program to go for. It doesn't mess about with fonts, WYSIWYG (what you see is what you get) and all that nonsense, it doesn't even use GEM (except for the menus and the file selector). The approach is a little daunting at first, especially for those newer ST owners that have been weaned on a diet of GEM, but once you're used to it you'll never look back.

Version 5.5 fixes the only major problem with Protext: the lack of a thesaurus. Some people wouldn't be seen dead using one, but any right-minded soul will know how useful they can sometimes be - even more so if it's on hand at all times.

The thesaurus works in the same way as the dictionary, being loaded from disk as needed, so memory space isn't wasted. It has 43,000 entry points (ie things you can look up) and 627,000 responses, which is, er, quite a lot really. It's point-and-click; any of the listed responses that take your fancy can be clicked on to obtain another list of words (and so on ad infinitum if you're not careful).

There are some more minor changes. The spell-checker will now detect if you've used the same word twice (twice in a row (not such a silly mistake as you may think) and checks that each sentence begins with a capital letter. The word count option has been expanded to give you some stats about your copy, such as the average word and sentence length, the number of different words used and even a complete list of every word used together with its frequency.



\* Whaddya mean, Atari not found? There are plenty of words that rhyme with Atari. Ferrari, for instance. And - um - dairy (almost)

Automatic hyphenation (something that, strangely enough, seems to be more common with desktop publishing programs) has been incorporated too. This can help reduce the amount of blank space in justified text by spilling long words in appropriate places. Naturally this will only be useful if you're planning to print from Protext itself, but it does work well.

A new conversion format has been added. You now have the option of converting to RTF (Rich Text Format). This is used by a lot of Apple Macintosh software. It's more prominent one probably being Microsoft Word, so if you use a Mac at work and write on your ST at home, for instance, this could save you a lot of time trying to transfer files between the two.

The online Help option has been revamped and the info is now displayed inside a homemade scrollable window. Any highlighted word in the text can be clicked on and more help for that particular command. At least the on-line help is really useful, especially for finding out about those more esoteric commands when the manual is propping up next door's greenhouse.

The only disappointing thing about Protext 5.5 (apart from its need for 1MB of memory) is its price - £152.75. Even the upgrade from version 5.0 is £30. But if you can afford it, Protext is the word.

## UNBELIEVABLE (EXCEPT IT'S NOT)

Microdeal is fit to burst with excitement, all because its Replay sampler was featured running on an ST on Channel 4's Sixtynine something at the beginning of September. And the demonstrators? None other than those cheeky chaps with the strange shorts and vacant-voiced vocalist, EMF.

But then Microdeal is used to fame. Apparently its sampler has been used in videos by King Bee (er, who?) and - yes! - Paula Abdul. Perhaps it has something to do with the fact that its (rather rashly-stated) policy is to give away free products to known and up-1s-coming artists. Doubtless ST Assist is about to be invaded by thousands of not quite made it yet artists all claiming their free gear.

Of course, this is further proof (as if any were needed) that the ST is the computer to own if you're even faintly interested in music. Or EMF.



\* Protext 5.5 was used to write this very page! Spooky, huh? (Well, no, perhaps not.) The thesaurus is in full swing here.

processor to buy, it's lasted for over five years and it's not about to become redundant now.

Amor is at 611 Lincoln Road, Pearlyborough PE1 3HA. Tel: 0730 88900. (Incidentally, by going to the Help menu, choosing About Named Subject and typing in Stylentler.

## NOVELTY ISLAND

Go on, admit it. How many times have you been stuck for a rhyme? That embarrassing moment when you just can't think of anything. What fits with transubstantiation? How can you make orange water? There's one thing you need - a rhyming dictionary.

And, as it happens, BSA Databases can do you one cheap with no questions asked. Its program Rhyme King will find combinations beyond your wildest dreams. Just type in the word you want to find a rhyme for, wait a couple of seconds and a whole lot is displayed.

It doesn't just handle straightforward rhymes, either. You can search for alliterative words (ones which have the same initial letter as people, pepper, pipe), consonance rhymes (where the final consonant stays the same but the vowels differ - people/pepper) and assonance rhymes (only the final vowel sounds rhyme - meet/seen/greed).

Most of the time the program works well, but occasionally it'll throw up something that you can't help but laugh at, ie that you've never heard of. Enter 'oblique' and it gives 'communique' as an option. 'omeliste' gives 'novelliste' (neatly, but not quite) and 'marais' spews out 'vass'. What the hell is vass?

It has a variant go with orange, the only unrhymable word in the English language (so they say), but only manages 'orange' or 'challenge'.

BSA says the program is aimed at lyric writers, poets and rappers. Unless you fit into one of these categories you're unlikely to find much use for Rhyme King (apart from a laugh or two) especially as it's £20.

BSA Databases, 44 Hornsea Road, Wokerhampton WV6 0HF.

Ed Rickitts

## ARE YOU BORED OF YOUR KEYBOARD?

If you owned a Spectrum before your ST you may remember that some games (Elite for example) came with a keyboard overlay kit cover up that horrible plasmoid-style keyboard. Been yearning for overlays for the ST ever since upgrading? Stop fight this way...

An outfit called Silverbird Computing is producing just the product you're looking for. Its founder, Mel Hooten, was so frustrated by all the commands he had to remember when playing his flight sims he decided to set up a company specifically to produce overlays. They simply fit over any ST keyboard and have spaces for you to write in the commands in each key.

I'm not entirely convinced of the value of these overlays. In the end, they serve the same purpose as having the manual open in front of you. Because the keypad is separate from the keys, instead of actually fitting around them, you still have to divert your attention from the keyboard to find the command you want.

The overlays are available in packs of five for £5 inclusive, from Silverbird Computing, 47 Barton Road, Beds LU5 6LG.

☎ 02525 2614



\* Can't find that vital key? Then read the flippin' manual. Or get one of these dead sexy new keyboard overlays and end up doodling all over it as you wait for Flames of Freedom to load.

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The super-compact Philips PCL 101 Notebook, takes up less surface area than an A4 page, weighs just 3 3/4 lbs, is just over 1" thick, yet only costs £449. The PCL 101 is last (10MHz CPU) with 1Mb RAM and a 1.44Mb, 3 1/2" standard floppy disk drive.

The easy to read LCD CGA screen measures just 3 1/2" x 7 1/2" and displays crisp, clear characters and sharp graphics at CGA resolution (640x200 pixels). The keyboard has 80 full size full travel keys with 12 separate function keys, emulating a full-size industry standard keyboard.

Industry standard serial, parallel and external monitor ports, are all included. Power can be supplied from the mains via an auto-switching, multi-voltage adaptor and charger, or by a Ni-Cad battery pack that snaps flush into the main body case. With its sophisticated power management, the battery lasts for about 3 hours (and takes 4 hours to recharge). The PCL 101 offers automatic audio battery low warnings, to help ensure that you never lose any valuable data.



## PACKAGE INCLUDES

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**£449**

REF. N8C 7101 + VAT = £527.58

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Bright, backlit LCD screens display VGA graphics at 640x480 resolution, with a port to plug in a colour VGA monitor to show the graphics full potential.

These compact Notebooks weigh just over 5.9 lbs (7 lbs with battery) and measure 12 1/4" x 10" x 2". They can be powered from the mains, via the multi-voltage mains adaptor, or by their own batteries, which can be recharged while in use, or independently in approximately one hour. Commodore's Powersave feature increases battery life to up to 6 hours and, along with optional rechargeable battery packs, gives you continuous PC power on the move!

## SPECIFICATIONS

|                                   | 286   | 386   |
|-----------------------------------|-------|-------|
| • PROCESSOR                       | 286   | 386   |
| • CPU X 3.3/3.33                  | 20MHz | 33MHz |
| • LANDMARK MMIO                   | 1     | 2     |
| • 1MB RAM (EXPANDABLE TO 5MB)     | 1     | 2     |
| • 3 1/2" 1.44MB FLOPPY DISK DRIVE | 1     | 1     |
| • 20MB 23MB HARD DISK DRIVE       | 1     | 1     |
| • VGA GRAPHICS - RES 640x480      | 1     | 1     |
| • 3 1/2" x 7 1/2" BATTERY LIFE    | 1     | 1     |
| • PARALLEL SERIAL & VGA PORTS     | 1     | 1     |
| • UP TO 6 HOURS BATTERY LIFE      | 1     | 1     |
| • 1 YEAR ON-SITE WARRANTY         | 1     | 1     |
| • WINDOWS 3.0 + MOUSE             | 1     | 1     |
| • MS-DOS 4.01 + GW-BASIC          | 1     | 1     |
| • ACCESS - 30 PROCESSOR APPROVAL  | 1     | 1     |
|                                   | £299  | £379  |

## 286 WITH 20MB HDD

**£299**

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40Mb HARD DRIVE VERSION - £199

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| NEWCASTLE SHOP:    | 100 North Shields, Newcastle, NE28 7JL             | TEL: 091-273 4707 |
| LONDON (GLIMPOSS): | 1st Floor, 309 Oxford Street, London, W1A 1AD      | TEL: 071-629 1234 |
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Which computer(s), if any, do you own?

1252



## OS TWO TWO

IBM should, as you read this, have released a beta version of OS/2 2.0 that runs Windows applications in standard mode and includes the Workplace Shell. If the code in this latest release is without major bugs, sources believe the company may ship the final version by the end of the year.

However, other insiders contend that IBM will have to struggle to meet this deadline. Some users questioned whether IBM will have time to incorporate the APIs from Windows 3.1 by then, given that both programs are expected to roughly the same time frame.

■ A user group meeting last week, Microsoft chairman Bill Gates said, "We think [Windows binary compatibility on OS/2] will be a difficult challenge that IBM won't achieve."

## FONT FIX

Baffled by the multitude of fonts and font formats? Ares Software may be your saviour. It plans to introduce a Windows utility that lets you convert files between major font formats.

Scheduled to ship in December, the \$99.95 FontMonger converts between Adobe PostScript Type 1 and Type 3, Microsoft TrueType, Nimbus Q, Bitstream and Hewlett Packard fonts.

The program supports fonts in Encapsulated PostScript, Adobe Illustrator and Windows Metafile formats, allowing you to modify font outlines in a Windows graphics application, such as CorelDRAW or Illustrator. You can also combine characters from multiple type families into a single font that can be accessed from the keyboard.

The program relies on algorithms to convert sophisticated "hinted" fonts, such as Type 1 and TrueType.

"FontMonger doesn't map TrueType hints directly into Type 1 hints," said

## WHEN A 286 CHIP JUST ISN'T ENOUGH

Having observed all the praise heaped on the new Amstrad PC286 games machine by software houses and media alike I can keep quiet no longer.

Come on guys! Although the idea is basically sound the inclusion of a 286 as the central processor is typical of the penny pinching attitude at Amstrad. Just how much cheaper is a 286 chip over half-decent 386 nowadays, eh? Not a hell of a lot, I'll tell you.

For the majority of the better game releases now appearing on the shop shelves a 386-spec machine is the minimum standard for comfortable gaming. Wing Commander 2, Secret Weapons of the Luftwaffe, King's Quest 5 and Falcon 3.0 are prime examples.

Laughably, the fact that US Gold's Links is being included in the pack will give

- Will Amstrad's new 286 Games PC be powerful or fast enough to run today's PC games?
- Digital Integration's new swing wing flight sim
- Beta OS/2 2.0 set to emulate Windows
- Befuddled by fonts? Then you need fontmonger



• The new Amstrad's PC286 'games machine' - ready for the real world?

the game away in a jiffy. Links plays relatively slowly on my 20MHz 386. On Amstrad's paltry 16MHz 286 it'll crawl. For God's sake Amstrad, take a look out the window once in a while, eh? That's where you'll find the real world!

Ernie Brock, vice president at Ares Software. "It analyses the font and then generates the appropriate set," hints itself. It has a whole set of algorithms for finding out where the hints should be placed. ■ ■ ■ Contact Ares Software on 0101 415 578 9090.

## WINDOW STEAMER

WordPerfect and Microsoft are stepping up the Windows word processor pace as both companies struggle to get their Windows products out of the door. Microsoft originally expected to ship Word for Windows 2.0 by the end of the year, but the company now plans to ship ■ ■ ■ upgrade during October.

WordPerfect has repeatedly said that it plans to ship WordPerfect for Windows in October.

Winning the race at market won't mean much, according to analysts. The major customers are going to wait to see

both before standardising on either one," said Jeff Tarter, editor of Software in Walworth, Massachusetts. Neither company, however, may make the October ship date, sources said.

WordPerfect posted a notice earlier this month on the CompuServe bulletin board saying it was postponing the release of the next beta. WordPerfect didn't give a date for the next release. According to sources, although the Microsoft upgrade looks good, it still needs more work and might not be ready until the end of the year.

■ ■ ■ Contact Microsoft on 0734 500741.

## V.1 ENGINE

WordStar for Windows 1.0 will resemble a page-layout program owing to its top ■ ■ ■ portions of NBI's Legacy word processing engine. The program employs a frame-based page layout techniques and includes precise

typographical controls, table generation tools and a variety of graphics tools. It will also have Bitstream's FontMaster rasterizer and 15 Bitstream fonts built in.

Offering keyboard compatibility with WordStar 6.0 and WordStar 2000, the package also features a vertical page numbering multiple text tools. You can import more than 50 types of files without reformatting.

WordStar hopes to ship the package within the next several weeks.

■ ■ ■ Contact WordStar 081-943 8865.

## NEW IMAGE

Macros, image processing, document management and networking capabilities have been added to Legacy in an upgrade effort to lure users away from Am Pro 2.0, PageMaker and Ventura Publisher.

Legacy 2.0's macro editor enables you to automate document creation. You can open multiple macros simultaneously with the on-line debugger. The \$495 software, which the company hopes to ship in mid-November, will include 2 macros and 10 templates.

The image processing capability, which supports 256-colour and grey-scale images, lets you edit mapped images. You can, for instance, resize an image without changing the proportions, crop and control features such as brightness and contrast. The upgrade also lets more than one user open the same file simultaneously. You receive a message that the file has been opened by more than one user and only the first user's changes are saved in the original file. ■ ■ ■ Other changes are saved elsewhere.

Other new features include floating frames that move only when the text it which they are anchored moves, and an interactive grammar checker that checks changes as soon as they are made.

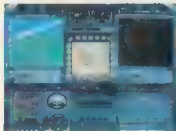
■ ■ ■ Contact NBI on 0101 303 938 2626.

## 'VISUALLY SPECTACULAR' FAST JET FLIGHT SIM



After a quiet period flight simulation aficionado Digital Integration is busily working on a new fast-jet sim based on the Tomado - one of the heroes of the Gulf War.

The game will pit the player against the Iraqis, featuring a variety of missions including a campaign. The structure of the campaign has yet to be decided but such mission will, reportedly, include realistic planning and attack modes. A mission's results will affect the next and



interaction with ground forces will be included. Deception tactics may be added in the air and on the ground.

According to Digital Integration: "All the buildings, structures and so on are from diagrams, plans and photographs (rig hardened aircraft shelters). The emphasis in Tomado is on realism. You can fly down valleys and along rivers. There are railways, highways and so on."

There are over 30 different aircraft including Su-17



(Fitter), Mi-26 (Halo - large transport helicopter), 6-76 (Soviet AWACS) and Tu-160 (Blackjack). Enemy aircraft have been taken from photographs of Iraqi installations.

It's very confident about Tomado's visuals: "Nothing approaches Tomado visually - and that includes Falcon 3.0. We've seen it recently and we see nothing it's worth about with that product." Tomado is due out in early 1992.

■ ■ ■ Contact Digital Integration on 0276 684959.

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**SDL**

## DESKTOP PUBLISHING

DABBLING  
IN DTP

DTP on the ST has taken many revolutionary steps towards publishing perfection, but there are so many packages out there, how do you go about choosing one? Nial Grimes shows you what they do, how they do it and which one's best for you

Of all the industries affected by the arrival of the modern computer, the publishing industry has surely seen some of the most drastic changes. Work which would have at one time taken a whole team of typesetters days to complete can now be carried out by a handful of skilled computer operators in a matter of hours.

The release of computers such as the Atari ST, with its fast processor and excellent high resolution display means that anybody with the inclination can be involved in the DTP revolution. But with such a bewildering amount of packages on the market, all claiming to offer the ultimate in ST desktop publishing, what equipment do you need and what makes a good DTP package? More importantly, which package should you choose?

## SYSTEM REQUIREMENTS?

Any ST can be used as a desktop publishing machine, from the basic 512K to the TT. Packages such as Timesworks DTP will quite happily run on a standard 512K machine, although one megabyte of RAM is needed for all but the most basic tasks. If you plan on using Calamus, you will require a mono monitor and a minimum of one megabyte of RAM, rising to two or more if you are fortunate enough to own an Atari laser printer. Generally speaking, one megabyte of RAM should be looked upon as a minimum.

Acceptable results can be obtained from even the humblest dot-matrix printer, but if your aim is anywhere near professional results, a laser or inkjet printer is a must. A good inkjet printer, capable of giving near laser



quality results can now be bought for very little more than the price of a reasonable quality dot matrix.

Other equipment, such as a hard disk can prove useful but one or two floppy drives, depending on which software package you intend to use, will usually suffice.

## FEATURE PACKED?

A good question to ask yourself before buying any software package is what you are actually going to use it for, possibly writing down a list of your requirements. This is even more important as far as desktop publishing is concerned as there are so many features on offer. Full colour separation, text rotation, vector fonts – the list goes on. It is always worth remembering that features you will not use are not worth paying for. Similarly, straying on features which you will need is a false economy.

## WRITE ON TARGET

If your application is largely text based, the type of fonts used by the package will be of vital importance. There are currently two types of font system in use: 'bitmap' and 'vector'.

Bitmap fonts work by storing a bit image of every letter and point size needed for both screen and printer. Some packages have the ability to magnify smaller fonts to give two sizes for every bitmap. This produces the 'jagged edges' or 'jaggies', synonymous with the bitmap system. DTP packages such as Timesworks DTP use Atari's GDOS to produce bitmapped fonts.

The more modern 'vector' or outline fonts, rather than storing a bitmap, use a mathematical description of the characters. This means that fonts can be scaled to any size without loss of detail and can in many cases be rotated, bled and distorted to give some astounding effects. As only one description is needed for each letter, vector fonts use very little precious memory. Packages such as Calamus and PageStream 2 use vector font technology to produce a stunning screen display and hard copy.

Most ST desktop publishers (and indeed all packages on review here) allow text to be edited within the program. However, if you are likely to be adding a large amount of text, a built-in text editor such as the one found in Calamus is a definite advantage, particularly when the screen update is slow.

## PICTURE THIS

Being able to combine text with graphics is one of the main attractions of desktop publishing, so it is quite likely that the graphics capabilities of the various packages will play a big part in your decision. If you are planning on using graphics produced with an art package the question is whether they can be directly imported and, once imported, can they be edited? There is nothing more annoying than having to quit your desktop publisher to make a small change to some graphics.

We have come to expect from GDOS:

Lack of PostScript support is not the deficiency it may seem at first, as Calamus can produce results similar to those you would expect from Postscript on practically any laser printer.

Although often criticised for its complicated user interface Calamus remains a very usable system. Complicated it may be, underpowered it is not.

## FOR

- ▲ Vector fonts
- ▲ Lightning print speed
- ▲ Advanced effects such as shadowing and rotation

## AGAINST

- ▼ Price
- ▼ Memory intensive
- ▼ Confusing at first

**COST** £225  
**VALUE:** Good

Calamus has long been considered to be the pinnacle of ST desktop publishing, boasting its own custom vector font system and a whole host of other features not seen on the ST prior to its release.

Rather than relying on GEM menus, Calamus uses a complex set of icons to accomplish most operations. This has the disadvantage of taking a while to learn but, once learnt, it is doubtful whether you will find yourself asking 'if only I could...'.

Calamus places emphasis firmly on effects. If complex layout is a stipulation, you will not find a better package. Text can be rotated to any angle with an accuracy of a tenth of a degree, shadowed or even given a raster percentage to produce shading.

For straightforward text a 'typing chain' idea is used and while complex, you cannot help thinking that for plain text the same task could be accomplished by Timesworks in half the time. Screen update is reasonably fast, but for speedy manipulation a built-in text editor is provided which can 'lock' text out of a frame to be edited at any time.

Everybody likes a quick result from their efforts and it



Calamus uses a complex set of icons to accomplish most of its operations

In this area that Calamus excels. A full page of text and graphics can, in most cases, be printed in under a minute on a suitable laser or inkjet printer. It makes a change to see speed limited by the printer instead of the snail's pace

**PRODUCT: Timeworks DTP COMPATIBILITY: ST FROM: Electric Distribution CONTACT: 0480 496666**

When it was released just over three years ago, Timeworks DTP was considered to be somewhat of a revolution. Costing just £99 it was the first truly affordable DTP package, having more than a passing resemblance to the industry standard Ventura Publisher.

Timeworks ST is ported from the PC version, meaning it clicks rightily to the GEM environment and uses GDDOS to provide on-screen and printer fonts, the main disadvantage of using GDDOS being the speed at which it operates.

Using a style tagging system, Timeworks is one of the best systems for handling large amounts of text at any price. Anything from a paragraph to a whole book can be given its own style name and details. Piping text from frame to frame is simplicity itself making Timeworks ideal for catalogues, price lists, manuals and other text based applications.

Graphics capabilities are not quite up to the standard of text handling. While an ample range of drawing and editing tools are available, the system fails to perform when it comes to printing, often mistaking out graphics when several pictures are contained on one page. To be fair this problem only occurs under certain circumstances, but if your application is graphical you might be well advised to look elsewhere.

A good range of graphics and text import facilities are provided, covering the standard First Word Plus, Word Writer, GEM Paint (IMG) and Gem Draw (GEM) as well as



• Easy to use and intuitive, Timeworks is a good option for the newcomer to desktop publishing



other packages more familiar to PC owners such as Word Perfect & PC Paintbrush.

Timeworks is probably the best option for the newcomer to desktop publishing as it is very easy to use and intuitive.

Despite its simplicity Timeworks DTP is not a toy; there is at least one semi-professional magazine being produced in the UK using a combination of a Mega ST, Hewlett Packard DeskJet and Timeworks DTP.

**FOR**  
▲ Price  
▲ Excellent text handling  
▲ Postscript support

**AGAINST**  
▼ GDDOS means 'joggles'  
▼ Some printing glitches

**COST £99.95 VALUE: Super**

## LOOKING GOOD

Probably the most important feature of any DTP package is its user interface. All packages on review use the GEM system to varying degrees. Timeworks relies on simplicity as its strength while Calamus provides an icon for every feature you are ever likely to use and many more besides.

In a way, the decision will depend on which DTP packages you have used before. Those weaned on frame based packages such as Ventura might prefer the Calamus frame system, finding PageStream's point and click interface annoying, and vice versa.

If your local computer shop is not able to give you a demonstration, the public domain is filled with demo versions of commercial packages, including at least two of those on review here. These provide an excellent way to ascertain whether a package suits your needs and are usually available directly from software houses or from most reputable PD libraries.

## PERFECT PUBLISHER

If it is impossible to pinhole any package as the ideal desktop publisher. The best desktop publisher is one that suits your needs, however most packages aim at a particular market and certain guidelines can be given.

## THE HOME USER

If your aspirations go no further than the parish newsletter Timeworks DTP will provide the ideal solution running on any ST and producing good results. The simplicity is second to none and even those new to the whole concept of DTP should have no problems.

## THE SEMI-PROFESSIONAL

PageStream 2 offers a huge range of features for a relatively low price and will probably handle any application you are prepared to throw at it. Once again Timeworks makes a strong bid if your application is very text oriented, but given the choice PageStream 2 is a far more flexible system.

## THE PROFESSIONAL

Up until recently the professional arena was more or less sewn up by Calamus. The release of PageStream 2 offering colour separation, PostScript support and a host of other features has blurred this definition somewhat.

If colour is needed there is only one choice – PageStream 2. Both are capable of producing excellent results, and will handle even the most demanding applications. ■

## INTO PRINT

No printer 1 – You needn't feel left out. There are literally hundreds of bureaux just dying to turn your ST format files into printed masterpieces. These range from high street shops capable of giving you acceptable, laser quality results to typesetting outfits which can offer a professional 1200dpi quality (similar in quality to the page you are reading now).

**Recommended contacts:**  
Sigma Publishing Systems Ltd.  
• 0252 370066  
Files accepted: Calamus (registered users only)  
Quality: 1200dpi.

**The ST Club**  
• 0602 410241  
File Accepted: PageStream, Fleet Street 3,  
Publishing Partner and Timeworks DTP.  
Quality: Laser 300dpi.

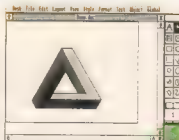
**PRODUCT: PageStream 2 COMPATIBILITY: AT FROM: Silver Systems CONTACT: 081-309 1111**

PageStream has had a rather turbulent history; early versions while being well specified were plagued by bugs. Later versions cured most of these and PageStream has developed a good reputation for itself as a solid entry level desktop publisher.

Version 2 is now upon us and claims to offer not only huge improvements over PageStream 1 but also over Macintosh DTP packages! Certainly, a look at the specification list will put paid to any theories that the ST is underpowered as a desktop publishing machine, but can it live up to the claims?

One of the main improvements is in font handling. PageStream 1 used vector fonts for printed output but the screen display could hardly be described as inspirational. Version 2 cures this and outline fonts are now displayed on screen to give true representations of the characters as they will appear in print.

No longer is finding professional quality fonts a problem as PageStream 2 will quite happily import both PostScript and Compugraphics fonts, as well as its own unique outline format. Ten fonts including the standard



• PageStream 2 claims to offer not only huge improvements to PageStream 1, but also over Macintosh DTP packages!

Times & Helvetica are supplied as standard.

Graphics handling is exceptional: not only can

graphics be edited within the program but PageStream 2 supports just about every format ever produced for the ST and many more besides. Not only can these graphics be imported but can, with a suitable printer, be colour separated to give a full colour copy!

PageStream 2 is an excellent package and puts behind it any problems previous releases may have had. Output looks great on any printer from dot matrix to laser and in the words of the advert, will not leave you wondering 'where's the MAC?'. ■

**FOR**  
▲ Colour support  
▲ Outline fonts  
▲ Excellent import facilities

**AGAINST**  
▼ Sluggish at times

**COST £199.95 VALUE: Best buy**



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D126) Disney Slideshow  
D128) Sleeping Bag Demo  
D130) System 5 Demo  
D132) Alpha Flight Megademo II  
D134) Share And Enjoy 46  
D136) Thames TV Demo  
D138) Vision Megademo  
D140) Fast Cars Slideshow  
D142) Mobed  
D145) Kelfens Wall Demo  
D147) Beast 2 Preview  
D149) Treaci  
D151) Share And Enjoy 47  
D153) Simpsons Mini Mega (XXX)  
D155) Glass World Animation  
D157) Congaman Animation  
D160) Anarchy Scratch Pack 39  
D162) Bugs Bunny Anim\*  
D164) Smurf +Cokeman Anims\*  
D166) Juggelte Animation

## UTILITIES

P02) A88K Assembler  
P04) North C  
U001) Jazzbench  
U004) Visicalc Spreadsheet  
U006) Intro Maker  
U008) Sidney And Friends  
U011) XLS Disk 1  
U013) Clip Art  
U015) The Magicians Utilities  
U017) Steel Moon Utilities  
U019) CADV  
U021) Super C Disk  
U024) Red Devil Utils 4  
U026) Amibase V3.76  
U031) Bootbench  
U033) C-Light 1+2  
U035) System Checker  
U037) Tetra Copier  
U053) Text Plus Wordprocessor  
U056) Wordwright Wordprocessor  
U058) Running Man Update  
U060) Mag Media Disk Utilities  
U063) Pendle Europa Utils  
U065) Fonts  
U067) ICPUG Printer Utilities  
U069) XLS Best PD 3  
U100) RSI Demo Maker

## GAMES

G004) Breakout Construction Set  
G006) Star Trek (2)  
G008) Drip  
G010) Quiz Master 2  
G012) Popeye  
G014) Tennis  
G016) Flaschbier  
G018) Treasure Hunt  
G020) Wet Beaver Games  
G022) Workbench Games And Hacks  
G024) PD Games Compilation  
G026) Movie Games  
G028) Eatmine  
G030) Return To Earth  
G032) Kiondika  
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G019) Battleforce  
G021) Arcade Games  
G023) Star Trek The Next Gen.  
G027) Hack  
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# THE PD COLUMN

Public Domain software and games for Amiga. PD software offers the computer owner a chance to find software around - James Leach takes a peek from the PD grapevine and brings you the juicy news

If you like watching demos on your ST, but can't be bothered to wait for the disk to finish reading all the data, it's now possible to buy the best demos on video. PPD: Public Domain has a range of what it considers to be the best ST demos on a **Videmo**. It comes on VHS format, and all the demos fit neatly on to one cassette. This costs £5, but PPD will happily make up an individually tailored Video cassette for a little extra charge.

Alternatively you can buy a **Videmo** separately on floppy disk for £2 each if you've got a decent monitor. I imagine that running the actual demos will always be preferable to watching a video of them, but it's nice to know that if your ST goes wrong you can still get your sound and graphics for via your telly.

## ■ IT A DISK-RACE?

Another issue of *The Disk* from Stephen Lord has majestically appeared in the PD Column office. *The Disk* is a magazine on floppy for the Amiga, and it's now up to issue ten. 5 Stephen seems to be cramming more and more on to each successive issue.

One instantly noticeable feature about the last issue of *The Disk* is that it's in a new easy-to-read format. This is done by a useful little program called **AMovie** which will display ASCII files in this large and easy-to-read font (and you can choose any font, size or colour, so it's flexible in the extreme). At the top, hints and stories on *The Disk* are viewed using **AMovie** and it works



• Once again *The Disk* is a veritable Aladdin's cave of Amiga programs

brilliantly, and gives *The Disk* a unique style.

Also on *The Disk* is a demo called **Drakpak 24**. It's a cyberpunk-style wander around a deserted installation somewhere in space and is very enjoyable if you're into the genre. Music is a separate file on *The Disk* is provided by the increasingly famous Daniel Rigby. It takes the form of a couple of Jean Michel Jarre tunes (everybody seems to use Jean Michel Jarre) I'll award a prize to the first person to send in a good version of an Ice T track, and the quality is better than much of the music you hear on other demos.

You'll also find a file of **New C** commands, so if you want to make

rainbows on your Workbench or add stars to your CUI then you'll find all you need here. There is a whole set of commands to add to your C directory.

Also included is a comprehensive review of **Electro CAD** a neat Workbench clock, a concise and pretty well-written manual, and a number of other PD



• It's flexible, it's easy to read and it's all on *The Disk*

world, a section of humorous stories (not necessarily computer related) and a program called **Record** which, once activated, keeps a track of all your mouse and keyboard activity, stores it in a file and lets you play it back, giving the impression that your Amiga is either possessed or being operated by the invisible man. Great for scaring the elderly and breaking the ice at parties.

Issue 5 of *The Disk* is great value at £1.50. It's easy to use, there is a link to the Amiga website, and it's not too technical, so everybody from beginners upwards can use it.

## WIN THE POOLS!

Something I've not seen in AD before is a Pools-betting program. Adam Squire of Gosport in Hampshire has written one for the ST. It's called **Formfinder v1.0** and, not quite simply, lets you which horse is likely to win a race. Of course you must first input all the horses, their previous records and when they last ran, then you click in the odds (as printed in any paper) and the computer churns out who it thinks will win.

Even though I don't know much about horse racing, I found **Formfinder** easy to use and indeed won over £8 million with it and bought myself a Testosterone. Actually I haven't managed to verify the degree of accuracy of the program, but as it's shareware, you can't really go wrong.

The PD version doesn't contain facilities for printing, loading and saving data, and it only allows a maximum of 10 runners per race. All the calculations it makes are, however, as accurate as it can be. If you'd like the full **Formfinder** program with all the above features you must register with Mr Squibb (a process which costs £10). The gets you a later version (up to v1.5) and full written documentation (even though the README.DOC that comes with the shareware version seems pretty comprehensive to me).

## THE FOOD OF LOVE

Amiganuts no stranger to the Column, has sent in a **JPM Sound Music Disk** (for the Amiga, naturally) included on it are versions (and very good ones too) of **Lessons in Love**, **Guaranteed**, **Amiganuts Power** (a bit customised, that one) and the perennially popular **Things That Make You Go Hmmm**.

Also available from Amiganuts is a pair of eight-channel music disks. These are packed with loads of tunes, and more than make up for in variety what they lack in graphics and quality.

Mentioned before, but updated, is **AmiBase Professional**. This database is socially incoherent, costing £10. It's a lot, but the program is comparable to those you'd find costing four times as

## CARING AND BARING

The good news for ST demo fans is that the vying for supremacy is still going on. All the one-upmanship (see PD Columns page 11) means, of course, that the user ends up with demos which are often better than he or she would have believed possible.

After *The Last Boys* did their *Ooh Criskey What A Scorching megademo* (my all-time favourite), *The Care Bears* (not totally English, as I previously stated, but predominantly Swedish) have returned to the fray with *The Cuddly Megademo*. It follows a similar format to *Ooh Criskey*, in that you must steer a spaceman-type character around a big scrolling screen to land him on platforms where he can access each demo. Instead of whitening starfields, *The Care Bears* have gone for very large spitz One



• All demos don't come any cuddlier than this, thanks to the Swedish Care Bears

demo features a sprite approximately a third the size of the screen wobbling around. Very impressive, I'd say, but why don't you slice it into a best-selling game format?

Another piece of coding is vying for the title of 'Best Demo'. It's from *The Platons*, and is called the *Ovdrivne Megademo*. The graphics are pretty, but the sound is really rather exceptional. There's a great demonstration version of the new *Synco Soundtracker*, which makes it well worth getting hold of if you're into ST sounds.

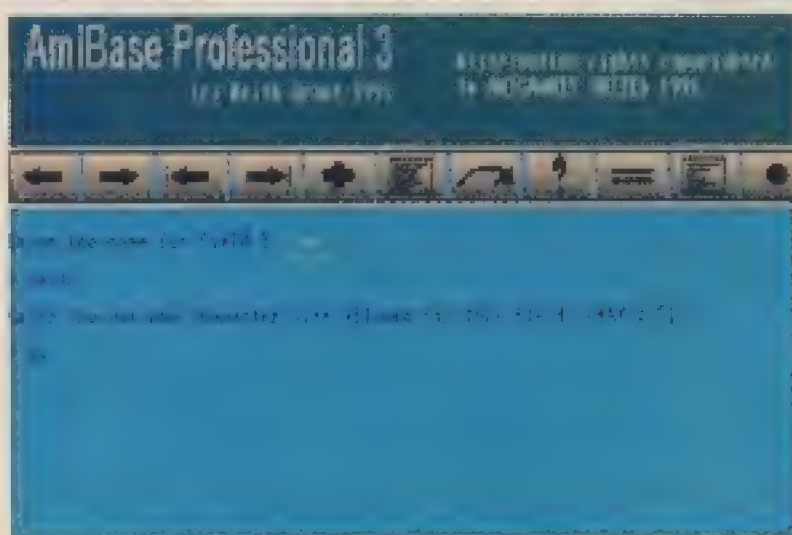
Both these demos are available from the State 808 Public Domain Library. It deals mainly with demos, and has strong contacts with all the major coding crews, so if you're looking for the cutting edge, get in touch with State 808 PDL.



• The *Ovdrivne megademo* will make your ST go weak at the knees



## PUBLIC DOMAIN



• Got lots of data to store? **Amibase Pro III** could be your saviour

much in the shops. **Amibase III** is on two disks and contains a utility which will happily convert all previous **Amibase** documents and files to work on the new version. Disk B also has full instructions and examples, so the lack of a big manual isn't really a problem. What remains to be seen is whether something costing £10 and distributed through PD libraries will actually sell in significant numbers.

**Amibase** joins **OctaMed version 2**, another program which is distributed by Amiganuts at a price between full and budget. **OctaMed** costs £20.

## CODE AND LONELY

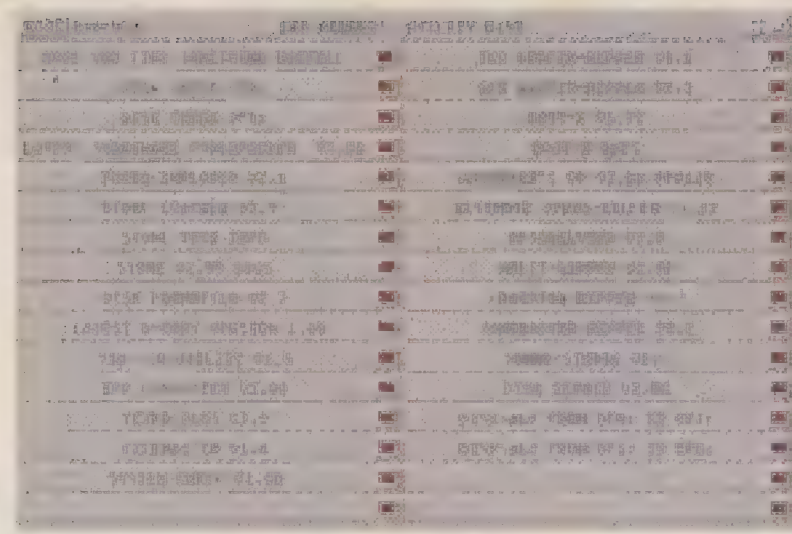
**ACC** is the Amiga Coders Club. This organisation periodically puts out a disk packed with goodies for both the beginner and the experienced coder. **ACC 16** is available from Amiganuts now as another piece of licenceware. It costs £3 until January when the price goes up to £4 and has many examples of neat code which you can adapt or rewrite to do anything from widening the useable screen to its limits to changing the colours and mixing with lightning speed.

It isn't for beginners, though, so be warned.

And finally from Amiganuts comes a disk filled with Amiga utilities. It's called **Eko-Ranger**, it's shareware this time and it has utilities which allow you to examine your disks, fiddle with graphics, convert IFF files, look after your files, check your entire system and repair disks. There is a whole lot more, including the valuable **Universal Virus Killer**. If you're serious about your Amiga computing, then contact Amiganuts for this disk. It's excellent value and you won't regret it.

## PICTURE THIS...

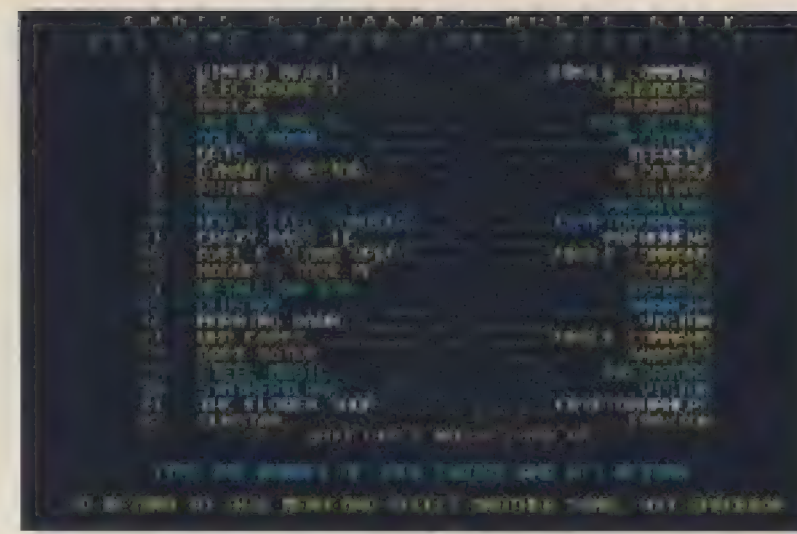
**Picture Puzzle** from Advantage PD is a PC implementation of those little plastic puzzles that you give to small children to keep them quiet on long car journeys. You have to slide round blocks, on a grid until you make up an image (there's no



• Eko Util has more utilities than mortal beings rightly deserve

box to consult if you're not sure what the image should actually look like when it's finished, but a small display can be called up which does give you an idea of the completed scene).

Instead of using an empty square to shift the blocks into (like the plastic puzzles) you can only swap two adjacent squares. This makes it both easier and harder. You still have to shuffle every



• Eko's music disk hath charms to soothe the savage beast, probably

piece right round the grid in order to get two vital tiles next to each other.

There are loads of options available. You can set the size of the grid of squares from two by two (a tad easy, this one) right up to hundreds (somewhat impossible). All you need is a PC which can support colour graphics and a mouse. Unfortunately the cursor keys won't work with **Picture Puzzle**.

## YOU'RE WANTED!

So you've got a Public Domain Library? You've got lots of programs? You're getting a good reputation? Fine, but if all your competitors are getting reviewed in **James Leach's PD Column**, shouldn't you be as well?

Send in all your Public Domain shareware, freeware or licenceware and you'll get into the spotlight and into the PD Libraries A-Z. All your competitors are.

## PD LIBRARIES A-Z

You've read the column, so now you want to know where you can get hold of the software. That's where the **Express PD library listing** steps in...

**8-BIT PUBLIC DOMAIN** - Spectrum, BBC, Amstrad CPC and ZX81 public domain software. Stamp and 10p for list. 1 Northolme Cl, Grays, Essex, RM16 2NX.

**17-BIT SOFTWARE** - PO Box 97, Wakefield, West Yorkshire WF1 1XX. Tel: 0924 366982.

**ADES PD LIBRARY** - All PD is less than £1. Some free. SAE for great details. Address 15 Deanes Close Dovercourt Essex CO12 4SH.

**ADPD** - For the cheapest Amiga PD around, some even free. Send SAE for details or disk for lists. 15 Deanes Close, Dovercourt, Essex CO12 4JH.

**ADVANTAGE** - 54 Bath Road, Cheltenham, GL53 7HJ. Tel: 0242 224340.

**AERIAL SHAREWARE** - IBM PC compatibles. Catalogue on a disc (free, state size). 7 Valehead, Monkseaton, Whitley Bay, Tyne & Wear NE26 9AY.

**AKORE SHAREWARE** - 7 Fishergate Point, Lower Parliament Street, Nottingham NG1 1GD. Tel: 0800 252221.

**ALDRO AMIGA PD SWAP CLUB** - SAE and blank disk for details. Lists growing every day. Send to: 24 Water Meadow, Queugeley, Gloucester GL2 6XR.

**ALPHA PD** - Amiga PD, monthly update of cat disc, £1 per disc. 22 Ceylon Place, Eastbourne, East Sussex BN21 3JF. Tel: 0323 267905.

**AMAZING AMIGA PD** - Over 500 disks, simply send extra blanks to cover costs + SAE for list to D Hopkins, 70 High St, Delabole, Cornwall PL33 9AH.

**AMIGA ANSWERS** - Integrated programmers PD library and problem solving service £1.50 for cat and programmers utility disk. 11 Mill Hill Rd, Norwich.

**AMIGA GOLD** - Good quality PD at favourable prices. Write: 6 Churcher Cl, Gosport, Hants PO12 2SL.

**AMIGA NON-RIP OFF PD** - For good Demos send disks+ postage to Mark, 50 Victoria Ave, Sleaford, Lincolnshire NG34 7LN.

**AMIGA PD BREAKTHROUGH** - You've tried the rest, now try the best! PD from 18p per disk. Swift dispatch of all orders. Contact Darryl, 12 Kent Avenue, Ross-on-Wye, HR8 5AQ, NOW!!

**AMIGA PD** - 2 megs free PD, we are giving away free Amiga PD, send a 2nd class stamp for the info-pack to: 16 Hermisto, Monkseaton, Whitley Bay, Tyne and Wear NE25 9AN.

**AMIGANUTS UNITED** - 169 Dale Valley Rd, Hollybrook, Southampton SO1 6QX.

**AMIGA SOFTWARE EXCHANGE** - Small and friendly gmaes group, adventures, sims and arcade, SAE for info to 13 Bournville Lane, Birmingham B30 2JY.

**AMOS PD** - 0942 495261.

**ANDRIKKOS PC LIBRARY** - PC Megapack: 14Mb compacted Shareware, £16. Cheque/PO or SAE for list: Andy Kyriacou, 17 Parkhurst Rd, London N22 4JQ.

**ANGLO AMERICAN SHAREWARE** - £1 a disk. Over 2,000Mb of top Anglo-American titles. Send two first class stamps for menu driven catalogue disk to 37 Deven Place, Newport, Gwent. Tel: 0633 259847.

**ARCH ANGEL PD** - Over 230 disks of Archimedes software. Send 75p for catalogue/demo disk to 9 Chancel Court, Pinhoe, Exeter, EX4 8QE.

**ARCH PD** - 200+ disks of Archimedes PD. Send £1 or SAE and disk to Arch, PO 109, Ferry Rd, Hullbridge, Essex, S55 6EL.

**ARROW PD formerly Scotsoft** - ST PD. Send an SAE and blank disk or £1 to 6 Kent Orchard, Perry Street, South Chard, Somerset TA20 2QB.

**ASGARD PD** - New programme (Amos) The Great Machine! - build your own Cugat library £1.50: 20 Langdale Drive, Flanshaw, Wakefield WF2 9EW. Tel: 0924 361101.

**ATARI ST DEMO SPECIALIST** - Range of POV, megademos, singles, music modules, slideshows, utilities. £1 for catalogue disk. Unit 1, Johnson's Shopping Centre, 29/31 Bond St, Blackpool FY4 1QB.

**BASOFT PD** - Original PD plus the best of the rest. SAE to BASOFT, 357 Church Rd, Basildon, Essex SS14 2EV. £1 per disk. New disk catalogue in exchange for blank disk.

**BATTLEAXE PD** - Amiga only, £1 a disk and digitising service, 80p for cat with free samples: 25 Kingswood, Thorpe Marriot, Norwich NR8 6UN. Tel: 0603 261060.

**BEGINNERS' PD** - ST PD starter disks. Two available. Over ten programs. £3 the lot. Write to James Thoroughgood, 114 Sandringham Way, Frimley, Surrey, GU16 5YF. Also send suitable SAE. No cheques.

**BBB (BIG BAD BRIAN'S) PD library** - 3.5-inch only from £1. Send formatted disk and SAE for catalogue to BBB, 35 Grangeside Ave, Hull HU6 8LP.

**BENETECH** - PC PD. 21 Loughborough Road, Leicester LE4 5JL.

**THE BEST PD** at best prices. Checked and virus free. £1.50 for demo disk, cat, and membership card. Chris Bayliss, 38 Grantham Dr, Bury, Lancashire BL8 1XW.

**BOOT UP PUBLIC DOMAIN** - Amiga Public Domain. Only £1 per disk. Send 75p for catalogue disk to Carol Wellington, 30 Sunnings Lane, Upminster, Essex RM14 2DQ.

**BROADSWORD PUBLIC DOMAIN** - Atari ST PD. 70p per disk. Send disk plus SAE to Flat 4, Moreton Court, 212 Dover Road, Walmer, Deal, Kent CT14 7NB. Over

350 disks.

**BUDGIE UK** - 5 Minster Close, Rayleigh, Essex SS6 8SF.

**BURMAN'S PD** - Amiga PD for 40p. For a cat disk, demos and a game send stamp + disk: Burman's PD, 41 Pinner Park Gdns, Harrow, Middlesex, MA2 6LQ.

**BYTEBACK** - 6 Mumby Close, Newark, Notts NG24 1JE. Tel: 0636 79097.

**BYTES** - Amiga PD software, over 1000 disks, call now for cat: 295 Peniel Green Road, Llanamlet, Swansea, SA7 9BJ. Tel: 0792 772745.

**C'S PD LIBRARY** - Sam Coupe PD Software. Send SAE and disk (or 80p) for disk catalogue to: CMS PDL, Donald Drive, Chadwell Heath, Romford, Essex.

**CALEDONIA PDL** - 250 Oldtown Rd, Hilton, Inverness IV2 4PT. Tel: 0463 225736.

**CAPRICORN COMPUTERS** - 35 Warwick Rd, Olton, Solihull, West Midlands B92 7HS.

**CHEZRON SOFTWARE** - 605 Loughborough Rd, Birstall, Leicester LE4 4NJ.

**CHRISTIAN COMPUTER CONCEPTS** - Christian PD/shareware. 5.25-inch. Ian Hurst, 7 Perrybrook Walk, Ashton in Makerfield, Wigan WN4 8TR.

**CIRCULAR PD LIBRARY** - 14 Morrison Drive, Lennoxton, Glasgow G65 7BA.

**COLONIA PDL** - PD swap shop! Amiga and ST. Over 350 titles. One for one. Swap free. For list write to 4 Eastfield Street, Lincoln LN2 5ES.

**CRAZY DIAMOND PD** - For the ST. Send SAE and blank disk for catalogue and free PD to 58 Hillside Rd, Sudbury, Suffolk CO10 6SA.

**CRAZY JOE'S** - Amiga PD. catalogue disk 50p. Tel: 0709 829286.

**DATA PD** - For Amigas and Amstrad CPCs. For disk-based catalogue and sample programs send £1 (Amiga) or £2.50 (CPC). Cheques/POs to T Kingsmill, 202 Park St Lane, Park St, St Albans, Herts AL2 2AQ.

**DELTA C64/128 PUBLIC DOMAIN** - SAE: Delta PD, 39 Station Rd, Claydon, Ipswich, Suffolk IP6 0HS.

**DELUXE AMIGA** - Exclusive review of Terminator 2 in issue 1. Send a £1 cheque/PO to Antony Grace, 2, Furzefield Crescent, Reigate, Surrey RH2 7HQ.

**DISCOVERY PD** - Coming soon. For Atari ST. Wide selection and excellent after sales help. Disks £1-1.50. Disk catalogue 50p. Write to J Thoroughgood, 114 Sandringham Way, Frimley, Surrey GU76 2.

comprehensive Amiga PD Library. All disks. Only £1. Monthly catalogue/magazine £1.50. Cheque or P.O. General Amiga, 19 Earn Court, Alton, FK10 1PT4.

**THE DISK** - Stephen Lord, 6 Stubbington Brink, Hebbden Bridge, West Yorkshire HX7 6LR.

**DRAGON PD** - Programmers wanted for Amstrad, CPC 6128 PD library. For more info, write to: Dragon Road, 415 (flat) Whitehall Road, Bristol, BS5 73P.

**DSD SOFTWARE** - ST users interested in art, graphics, pictures? then contact the PD library that specialises in them: 5 Leinster St, Runcorn, Cheshire WA7 1ER.

**DW SOFTWARE** - For the Amstrad CPC, send for free list: 62 Lascelles Ave, Withernsea, N Humberside, HU19 2EB.

**EUROPA PD** - ST PD All disks 075 from 75p, send blank disk or £1 cheque/PO to 1 Hindmans Rd, East Dulwich, London SE22 6.

**DYNAMIX PD** - PC, Amiga and C64 Public Domain. All new and best titles. For free details contact 132 Springwood, Llanedeyrn, Cardiff CF2 6UF. (SAE)

**EAST MIDLAND PUBLIC DOMAIN LIBRARY** - 54 Watnall Road, Hucknall, Nottingham NG15 7LE.

**ED's FREE PDL** - Public Domain for the Atari ST. Send your list for mine. 1-4-1 basis. EJ Carter, 184 Hatters Lane, High Wycombe, Bucks HP13 7LY.

**EDLIB** - Interactive, educational and productivity compilations of PD for Amiga. £1.50. All regular PD only 89p. Graphics Master 1 + 2, graphic image manipulation PD software: £3. Contact Edlib, Scotland Farm, Stockwood Rd, Brislington, Bristol BS4 5LU.

**ELMSOFT** - PO Box 17, Loughton, Essex IG10 2EE.

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**FORMFINDER** - (ST) from Adam Squibb 11 Beaulieu Place, Peel Common, Gosport, Hampshire, PO13 0QP.

**FORTISS PD** - Amiga PD. Watch the magazines for our advert or send £1 for catalogue disk to Fortiss PD, PO Box 2, Earl, Shilton, Leicester LE9 8LU.

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**FREEWAY PD** - For the Amiga. Loads of titles for only 99p including p&p. Send disk for list. Freeway PD, 11 Elizabeth Place, Somting, Sussex BN15 9U3.

**FUTURE PD** - Amiga PD only, 60p a disk, send £1 for list & demo to: 136 Guildford St, Grimsby, South Humberside DN32 7PW.







# Games Week

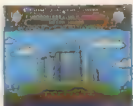
Outgoing, outspoken, but never outclassed, Stuart Campbell's reviews, tips and news tell you what's best for you and your machine

## STAR RATINGS

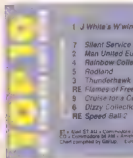
= Sean Connery  
= Roger Moore  
= David Hiven  
= George Lazenby  
= Timothy Dalton

## DIZZY IN MY HEAD

Just in case you're not completely sick of hearing about Code Masters' little egg hero Dizzy, here's one last little snippet



• Dizzy tries desperately to avoid hippy convoys in *Mugland*



On top of this Christmas coming celebration the Codes finally release the hugely popular fourth adventure in the aoid Chad *Mugland Dizzy*, on 16-bit formats in a couple of weeks' time.

The cartoon-graphics-and-puzzle-solving style is exactly the same as before, but the effort is the most accomplished of the lot. If you take the proper charts as your yardstick (ie all prices together), then this is my top bet for the Christmas No. 1.

## NO, REALLY...

Honestly, Empire's conversion of the Taito coin-op follow-up to *Qix*, *Volited*, is just about finished now, seriously.

Empire's programmers have been literally taking the arcade machine to pieces in order to dissect every last bit of information out of it, in an attempt at the truly definitive coin-op port.

Early impressions suggest that they might just have managed it, too, but keep watching this space for monthly updates until the game finally hits the streets in one of the Boing Day (week probability).

## 1 J White & Wind Snooker

|                        |             |                   |
|------------------------|-------------|-------------------|
| 7 Silent Service 2     | Virgin      | ST AG             |
| 2 Silent Service 2     | Microprose  | AG OT             |
| 2 Man United Europe    | Krisalis    | SP CO AM ST AG QT |
| 4 Rainbow Collection   | Ocean       | SP CO AM ST AG    |
| 5 Rodland              | Siem        | SP CO AM ST AG    |
| 3 Thunderhawk          | Core Design | ST AG             |
| RE Flames of Freedom   | Rainbird    | ST AG             |
| 9 Crusade for a Corpse | US Gold     | AG                |
| 6 Dizzy Collection     | CodeMasters | SP CO AM          |
| RE Speed Ball 2        | Microsoft   | CO ST AG OT       |

ST = Super ST AG = Commodore Amiga PC = IBM PC compatible SP = Spectrum  
CO = Commodore 64 AM = Amstrad QT = QDOS  
Chart compiled by Salsal - European Software Publishers' Award

## THE MOMENTARY RETURN OF... HERE IT COMES AGAIN!

This week: Games Which Don't Have Any Connecting Factor At All

The budget scene is as lively as it ever was in the run-up to the Christmas boom, and this month has seen the rebirth of all-time classics from the HIT Squad.



• Shooting Yourself In The Foot Lesson One - put out a Batman sub-game better than Chase HQ

*Bubble Bobble* (\*\*\*\*), the predecessor of *Rainbow Islands*, is possibly the best two-player arcade game ever, and on all formats the micro conversion is excellent, although without a lot of the coin-op's secret bonuses and so on. The Amiga and C64 versions are particularly worthy of note (the Speccy version suffers from a lack of music, which is pretty irreparable on the 128K machine but there you go), but on every format this is a truly great game. The only problem with it is that the one-player game is a bit lacking, but at this price, no-one should let it stop them from owning a copy of this superb game.

Also from the HIT Squad comes *Batman - The Movie* (\*\*\*), which was Ocean's third (I think) attempt at a game featuring the caped crusader. It was also the first in what became a long line of formulaic movie licence games made up of small sub-sections relating to various parts of the film, but if you can forget for a moment that this is the game whose success is responsible for *Nightbreed*, *Total Recall*, *Darkman* and *Terminator 2*, then you'll find a conversion here that's

really pretty spitting.

The platform sections were designed with a little more thought than you tend to see these days, and the driving sub-games are more than a match for many dedicated racing jobs, and generally it captures the movie's atmosphere admirably.

The label isn't itself down somewhat with this month's other release, *Dragon Ninja* (†). It's a copy of the coin-op which (on 16-bit versions) looks remarkably close to the real thing, but the programmers have somehow forgotten to include the 'jump' feature which makes things tricky in say the least.

The ST version also suffers from incredible slowness, and while the 8-bit ports are a touch more playable, they look awful. Even if you're the world's biggest *Ninja* fan (or indeed the world's biggest dragon fan), don't bother with this one. (All the games sell at £7.99 for 16-bit versions and £3.99 for 8-bits).

## BEG, BORROW

### THREE WHEELERS

This week sees the software world rocked by the simultaneous release (more or less) of not one, not two, not four, not seventeen, not... (Get on with it - reader's voice), but three games all with a strong driving theme. GranSim shows up with the long-awaited *Lotus Turbo Challenge 2*, MicroProse weigh in with its technically stunning *F1 Grand Prix*, and US Gold adds to the burden on the already-grazing shop shelves with the third game in the trillion-selling Out Run series, *Out Run Europe*. While the three are indeed all driving games, they all take radically different approaches to the theme.

### BEG

PI GRAND PRIX - MicroProse

This effort goes for the Indy 500 line, with polygon graphics and a serious simulation feel. A single race in F1 GP, using the shortest option available, is still likely to

take you a good 20 minutes to complete, and this might deter the fast-action fans amongst you, which would be a terrible shame because this is a tremendously good game.

All the tracks are crammed with graphic detail, but everything still moves alarmingly quickly, and the minutiae of F1 racing have been captured to a level that's almost brain-socket-like. Flag men, pitstops where you even get your windshield wiped with a chaqueta, drivers pushing their broken-down cars off the track in the middle of the race, the whole deal, as well as everything Indy 500 fans would expect in the way of action replays, camera angles, etc.

Geoff Crammond, author of the trackily over-rated *Stunt Car Racer*, has really gone to town this time, and while he was there he's bought a driving game which is a dead-on certainty to achieve well-deserved legendary status within minutes.

### BORROW

LOTUS TURBO ETC - GranSim

*Lotus Turbo* etc is a sequel to the popular *Lotus Turbo Esprit Challenge* with a number of dirty new features added, such as the chance to drive two separate *Lotus*



• You'd never guess, but this is the desert level

## COPYCAT CORNER

Fanatical disciples of this column may also be familiar with my scrawlings for MCE's sister mag *Amiga Power* (the best-selling Amiga games magazine in the country, fact fans). If so, they may just remember a review of a game called *Challenge Golf* which I wrote in Issue Four of said organ. Imagine their surprise, then, to open this month's *CU Amiga* and see that very same review, practically word-for-word, reprinted on pages 24-25 in their so-called 'Readers Reviews' section (courtesy of one Peeyush Durani of Rosford). Now I know imitation is the sincerest form of flattery, but to my mind this is taking things just a little bit too far.

Games Week says: Thanks for the charming compliment to my journalistic qualities, everyone, but do your own slugging next time.

## PLAYING TIP

ELF - Ocean - Amiga and III

This funny little platform arcade adventure with the rather over-fussy graphics didn't do much for me when it was released a couple of months ago, but if you're a fan, you'll probably find this wee cheat quite handy. All you do is type CHORPOOD at any time and you'll suddenly have 50 pats. Quite what use 50 pats are going to be, is a question only Bill Lane will be able to satisfactorily answer.

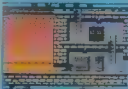
## THE BLUES BROTHERS

Titus - Amiga - £12.99 - C12.99 - 4.5 stars

Thus, *The Blues Brothers*. What a combination, eh? A couple of fat old rockers and the software house responsible for some of the most appalling software ever to disgrace any machine anywhere in the world ever (*Crazy Cars*, *Crazy Cars 2*, *Quick Trax*, *Fire And Forget*, that really dull and about the speedboats, the list is endless).

I approached this game with all the enthusiasm of a BMX Bandits fan going to a Guns N' Roses gig, but regular readers won't be in the least surprised to (discover) I was to be proved utterly wrong by one of the most completely excellent games of a famous pleasure to review since I started this column.

*The Blues Brothers* is a very genre-defining platform arcade romp, distinguished by fast, addictive gameplay, beautiful animation, excellent music and gorgeous cartoon graphics.



Prison security - who needs it?



• No. 2 in a continuing series of power-based screen shots - *Blues Bros*

In look, feel and play it's something very close to perfect, and if you're a committed fan of Jake and Elwood (which I'm not by any stretch of the imagination) you may well form the opinion that this is the best game you've ever played.

There isn't anything particularly devastating in the design or anything, but the level of execution in every area is just wonderful, and it makes this game so enjoyable to play that I actually came into work early several times this week just to

sneak in a few quick games.

You might notice that I'm not giving you much specific detail about the actual game here, but there's a reason for that. A simple review is easy to plagiarise, but pop into your friendly local software shop and take a look at this game for yourself. If you can walk back out without buying a copy of your own, then make your next stop a psychiatrist, because there's something wrong with your head.

**TOP 10 ALL FORMATS BUDGET**

|                       |                  |                       |
|-----------------------|------------------|-----------------------|
| 1. Bubble Bobble      | 2. Hill Squad    | 3. SP CO AM ST AG OT  |
| 4. New Zealand Story  | 5. Hill Squad    | 6. SP CO AM ST AG OT  |
| 7. Dragon Ninja       | 8. Hill Squad    | 9. SP CO AM ST AG OT  |
| 10. Batman: The Movie | 11. Hill Squad   | 12. SP CO AM ST AG OT |
| 13. Shinobi           | 14. Mastertronic | 15. SP CO AM ST AG OT |
| 16. Indiana Jones     | 17. Mastertronic | 18. SP CO AM ST AG OT |
| 19. The Simpsons      | 20. Hill Squad   | 21. SP CO AM ST AG OT |
| 22. The Simpsons      | 23. Hill Squad   | 24. SP CO AM ST AG OT |
| 25. The Simpsons      | 26. Hill Squad   | 27. SP CO AM ST AG OT |

SP = Super 32 AG - Commodore Amiga PC - IBM PC compatible SP = Spectrum  
CO = Commodore 64 AM = Amstrad 486 OT = Other

**BRAT - Inegrowks - Amiga**

To skip a level in this 'interesting' Lemmings-inspired scrolling mate thing, hold down the full stop key, the slash key and the asterisk.

Stuart's Top Tip Of The Week - do it twice times in a row and save yourself a lot of grief.

## AND BURN SPECIAL

## BURN

cars (the Esprit and the Elan), the ability to have up to four players at once through a modem link-up, and a wide range of weather conditions for drivers to race through.

The most pleasing improvement for me, though, is the use of the full screen in one-player mode, which lends the whole thing a much grander and more impressive air. Lotus 2 shares its predecessor's immense playability, but the only significant difference between the games in play is the environmental element - beautifully-realised snow makes the cars slide around, fog and darkness affects your visibility, desert sand slows cars down, and deviating from the road in the swampslands can result in your vehicle sinking into a marsh.

Now while I'm a great believer in the old maxim 'If it ain't broke, don't fix it', I'm far from convinced that Grinfin has done enough in Lotus 2 to make it worth buying if you already own the original. If you don't, then don't miss this, but otherwise see it first.

OUT RUN EUROPA - US Gold

OK, so 'burn' is a bit of a strong word for this acceptable enough little game, but in the light of the competition *Out Run Europa* looks like a relic from a bygone age. The *Out Run* connection is an extremely tenuous one, as this game puts you in a whole series of vehicles from a motorbike to a jet ski, and the action takes place all over the continent, even including the Channel!

The game looks very pretty, with small but detailed graphics and a fair turn of speed, but it suffers from the twin flaws of being irritatingly difficult and almost uncontrolable. You don't get anything like the realistic handling of Lotus 2 and particularly F1 GP, and as you bike or whatever careers ridiculously across the narrow tracks, you spend more time crashing than riding. You also can't go faster than some of the enemy vehicles, which causes some really annoying moments when they



• As you can see, *Out Run Europa* is pretty, but not exactly 1991 state-of-the-art

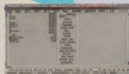
bash you around the road or even completely obscure your bike from view, and generally the overall design leaves a lot to be desired. It's almost a decent game, but in this market it's going to be completely crushed.



## PREVIEW

# THIS DISK'S SO BRIGHT YOU'VE GOTTA WEAR SHADES!

## AMIGA



• Using icons, Diskmaster makes disk operations easy

## ST



• These are more than just pretty patterns - Colourspace is a complete psychedelic experience

## PC



• Infoplus displays your computer's configurations on-screen

**ST owners, prepare yourselves!** On the Express Cover Disk next week we bring you a whole new psychedelic experience with Llamasoft's amazing Colourspace light synthesizer. With it you can create dazzling graphic patterns that affect your senses like no other piece of software.

For the Amiga we have *Diskmaster*, an essential utility that makes previously complex disk operations almost second nature. It's partnered with *FastDir*, a handy easy-to-use CLI tool which speeds up the accessing of files.

PC owners are also well catered for. *Infoplus* is an impressive program which enables you to check every nook and cranny of your computer to see how it's set up. And for the game freaks out there we have *Jumpman Lives*, an incredibly addictive platform game.

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